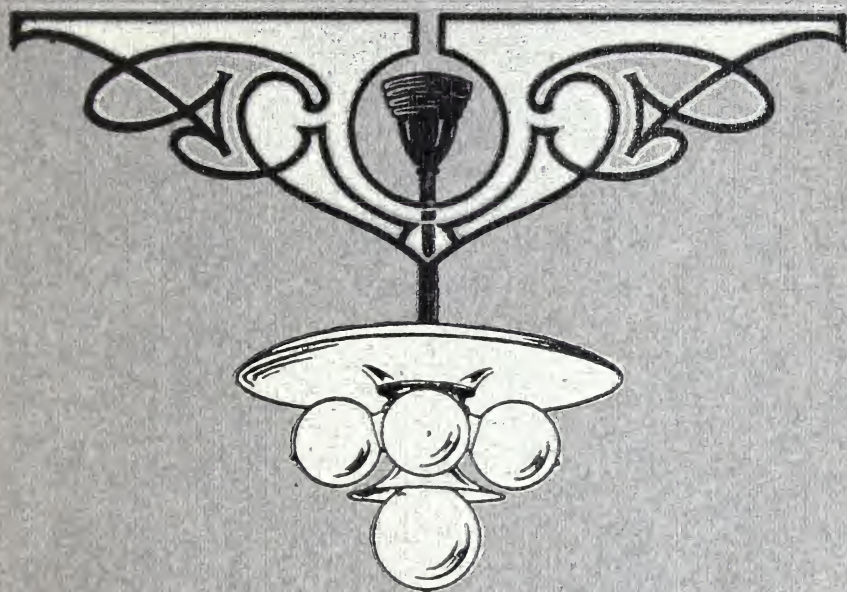


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BENJAMIN
WIRELESS CLUSTERS
& LIGHTING SPECIALTIES



CATALOGUE-B-16

BENJAMIN ELECTRIC MFG. CO.

MAIN OFFICE AND FACTORY
42 W. JACKSON BOULEVARD
• CHICAGO • U.S.A.

BRANCH OFFICES
27 THAMES STREET, NEW YORK
332 CROSSLEY BLDG. SAN FRANCISCO, CAL.



NOV. 1-1905



BENJAMIN WIRELESS CLUSTERS
AND LIGHTING SPECIALTIES

INTRODUCTORY

SINCE issuing Catalogue B-15 numerous improvements have been made in many of the clusters and other devices shown and a number of new specialties have been added and are listed herein.

DISCOUNT SHEET—Form B

Applying to Catalogue B-16

50% off list prices in broken package quantity.

50-10% off list prices in standard package quantity.

TERMS—30 days net or 2% for cash, if paid within 10 days from date of bill.

Where parties are not known to us we ship goods C. O. D., unless parties are suitably rated or give satisfactory references.

RESALE PRICES — 40% off list prices.

BENJAMIN ELECTRIC MFG. CO.

insulated cluster results.

In the series clusters, the contact plates are made in sections, each section (except the two carrying the binding screws) serving two adjacent lamps, the inner and outer plates overlapping each other, thus connecting lamps in series without wiring.

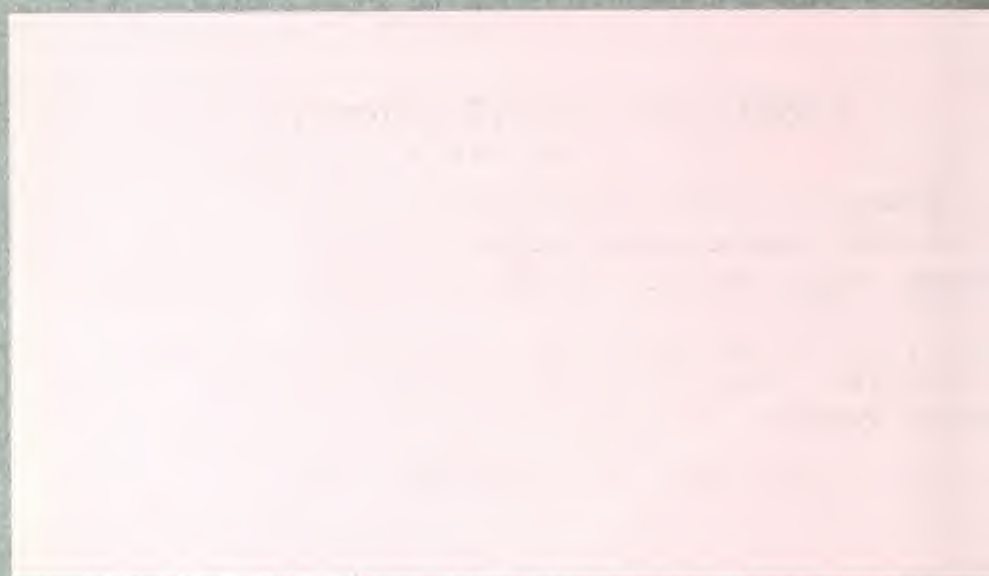
Wireless clusters for indoor lighting are required to be fibre lined, except the styles having a switch attached, which requires no lining.

Clusters for outdoor lighting have aluminum shells and copper threaded socket shells, but require no linings.

Other goods shown herein are of the same high standard as the clusters.

These devices are covered broadly by numerous patents.

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BENJAMIN WIRELESS CLUSTERS AND LIGHTING SPECIALTIES

INTRODUCTORY

SINCE issuing Catalogue B-15 numerous improvements have been made in many of the clusters and other devices shown and a number of new specialties have been added and are listed herein. Great care has been taken in compiling this catalogue to give full information relating to each device shown, giving a separate catalogue number for each part or combination of parts.

Standard package quantities have been established.

The wireless clusters consist primarily of an insulating base of porcelain, two one-piece contact plates attached thereto (each serving like terminals of all lamps in the cluster and each provided with a binding screw) and a removable casing of brass or aluminum supported by porcelain rings or bushings of special design.

In doing away with the necessity of wires in the cluster body, by combining the necessary elements of sockets upon one base, the cost of installation is considerably reduced, both for ceiling and pendant forms, and a neat, strong, durable and well insulated cluster results.

In the series clusters, the contact plates are made in sections, each section (except the two carrying the binding screws) serving two adjacent lamps, the inner and outer plates overlapping each other, thus connecting lamps in series without wiring.

Wireless clusters for indoor lighting are required to be fibre lined, except the styles having a switch attached, which requires no lining.

Clusters for outdoor lighting have aluminum shells and copper threaded socket shells, but require no linings.

Other goods shown herein are of the same high standard as the clusters.

These devices are covered broadly by numerous patents.

Instructions for Ordering

USE numbers appearing in first column, which numbers, including letter (if any), fully specify what is wanted. All clusters, sockets, receptacles, plugs, etc., are furnished in Edison base ONLY.

Clusters in which the lamps are designed to be connected in series are listed with a half number ($\frac{1}{2}$) forming a part of catalogue number.

Polished brass for interior fixtures and fittings, and polished aluminum for weatherproof clusters and sockets IS STANDARD except where otherwise indicated in catalogue, and same will be furnished unless otherwise ordered. Extra charge is made for all other finishes (see page 63).

In ordering pendant fixtures, give length from crowfoot to tip of fixture, otherwise standard lengths will be furnished.

Prices of fixtures do not include wires or lamps except where indicated in catalogue.

Goods are shipped at purchaser's risk, our responsibility ceasing when goods have been received in good order by transportation company.

This cancels all previous quotations.

Prices are subject to change without notice.

Parties unknown to us should remit with orders, unless satisfactory references are furnished.

Write for discounts.

See index on last page.

Benjamin Wireless Clusters

3

NATIONAL CODE STANDARD

Hundreds of thousands in use.



Style 1



Style 2



Style 8

Clusters with shells removed.



Style 1



Style 2



Style 8

Clusters showing flanges used where stem is required.



Style 1



Style 7



Style K

Benjamin Wireless Clusters are made for all classes of service.

Multiple—Interior

NATIONAL CODE STANDARD

Style 8 Cluster

Ceiling Forms

The small diameter of the Style 8 Cluster permits the use of smaller Reflectors than is possible with any other style Cluster and is accomplished without the sacrifice of a single feature that goes to make Benjamin Clusters standard.

The saving from the use of this smallest Cluster is at once apparent and commends its use for conditions where the volume of light necessary is not great.

Fibre
lined.



Style 8 Cluster

2½ inch diameter

Polished Brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Cat. No.	Put up 12 in : box	Cluster body only	With No. 3800 Flange attached	Std. Pkg.
82	2 Light Multiple	\$1 00	\$1.10	24

For special finishes see page 63.

The Cluster attaches to the ceiling with ordinary wood screws and any of the *Special Metal Reflectors* (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3223 flange. Made to fit Bossert boxes.

Where it is desired to use this Cluster in pendant form it is necessary to attach one of the following flanges. No. 3800 flange will be attached at factory if so ordered.

Style 8 Flange Backs with Screws Attached



Tapped 3/8-inch—Cat. No. 3800



Cat. No. 3223



Tapped 1/2-inch—Cat. No. 3850

Paper washers are used under heads of screws to protect the porcelain base.

Cat. No.		List Price	Std. Pkg.
3800	Flange tapped for 3/8-inch pipe	\$0 10	24
3223	Flange for attaching to 3-inch outlet box	10	24
3224	Flange for attaching to 4-inch outlet box	15	24
3850	Flange tapped for 1/2-inch pipe	15	24

Multiple—Interior

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NATIONAL CODE STANDARD

Style 8 Cluster

Ceiling Form

Cluster with
Reflector.
No Stem.



Metal Reflectors used
in ceiling form fit
cluster back and are
placed between same
and ceiling.

Style 8 R

A812—12-inch Aluminum Reflector shown

Cat. No.	The Special Reflectors listed with following group fit cluster back and require no holders.	List Price, complete	Std Pkg
82A	2 Light Multiple with A812 12-inch Aluminum Reflector	\$2.20	24
82M	2 Light Multiple with M812 12-inch Mirror Reflector	2.10	24
82T	2 Light Multiple with T812 12-inch Tin Reflector	1.40	24

For Reflectors see page 62.

Cluster with
individual shades for
each lamp opening



Cluster attaches
directly against
ceiling without stem.

Style 8 S

G2255—Opal Shades shown.

Cat. No.	Appropriate Shade Holders are included	List Price, complete	Std Pkg
82G	2 Light Multiple with G2255 2½x5 Opal Shades	\$1.60	24
82N	2 Light Multiple with N2256 2½x6 X-Ray Shades	3.20	24
82V	2 Light Multiple with V1505 1½x5 Pagoda Shades	2.70	24
82D	2 Light Multiple with D1506 1½x5 Diffusing Shades	2.80	24

For Shade Holders see page 59.

For Shades see page 61.

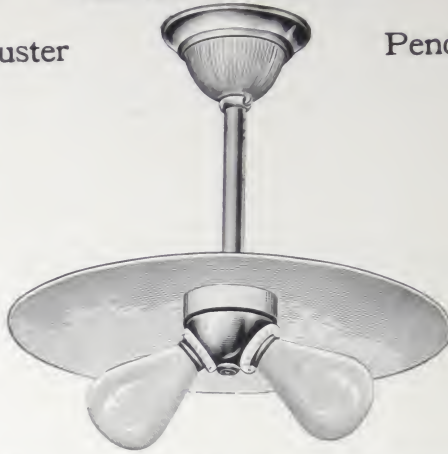
Multiple—Interior

NATIONAL CODE STANDARD

Style 8 Cluster

Fixture Stems (not exceeding 36 inches in length) will be made of $\frac{5}{8}$ -inch brass tubing; longer lengths, $\frac{3}{8}$ -inch iron pipe and $\frac{3}{4}$ -inch brass casing.

Low canopy and crowfoot are furnished unless otherwise ordered.



Pendant Forms

Standard length stem, 8 inches. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

Cat. No.	Style 08 R T812 12-inch Tin Reflector shown	List Price, complete	Std. Pkg.
082	2 Light Multiple without Reflector or Holder	\$1 70	24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package
Appropriate Shade Holder is included with the following.			
082P	2 Light Multiple with P32512 12-inch Porcelain Reflector	2 40	
The special Reflectors in the following group are supported between base and flange and require no Shade Holders:			
082A	2 Light Multiple with A812 12-inch Aluminum Reflector	2 90	
082M	2 Light Multiple with M812 12-inch Mirror Reflector	2 80	
082T	2 Light Multiple with T812 12-inch Tin Reflector	2 10	
For Reflectors see page 62			

ADDITIONAL LENGTH STEM Up to 36 inch ($\frac{5}{8}$ -inch brass tubing) 30c foot list. Longer Stems ($\frac{3}{8}$ -inch iron pipe and casing) 45c foot list.

Fixture Stems (not exceeding 36 inches in length) will be made of $\frac{5}{8}$ -inch brass tubing; longer lengths, $\frac{3}{8}$ -inch iron pipe and $\frac{3}{4}$ -inch brass casing.



Standard length stem, 8 inches. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

Cat. No.	Style 08 S V1505—Pagoda Shades shown	List Price, complete	Std. Pkg.
082	2 Light Multiple without Shades or Holders	\$1.70	24 assorted fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.
Appropriate Shade Holders are included in the following:			
082G	2 Light Multiple with G2255 2½x5 Opal Shades	2 30	
082N	2 Light Multiple with N2256 2½x6 X-Ray Shades	3 90	
082V	2 Light Multiple with V1505 1½x5 Pagoda Shades	3 40	
082D	2 Light Multiple with D1506 1½x5 Diffusing Shades	3 50	
For Shades see page 61.			

ADDITIONAL LENGTH STEM. Up to 36-inch ($\frac{5}{8}$ -inch brass tubing) 30c foot list. Longer Stems ($\frac{3}{8}$ -inch iron pipe and casing) 45c foot list.

An Up-To-Date Building in Which
Are Installed 2000 Benjamin Wireless Clusters



The Tallest Building in New York City

Among other prominent New York buildings in which Benjamin Clusters
are installed are the following: Mercantile Building, Barclay
Building, Times Building, Tabor Building,
Trinity Building and Hotel Breslin

Multiple—Interior

NATIONAL CODE STANDARD

Style 2 Cluster

Ceiling Forms

The Style 2 Cluster, measuring three inches in diameter, was designed to meet the demand for a cluster slightly lower in price than the Style 1 and possessing all of its advantages.

By combining all the features of the large Cluster on a smaller base, a much neater and more compact appearance is obtained, making the use of Style 2 Clusters desirable up to its maximum of four lights.

Fibre lined.

Bushing at lowest point has a knockout center to accommodate lamp cord for drop light or pendant switch.



Polished Brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style 2 Cluster
3-inch diameter

Cat. No.	Put up 12 in a box	Cluster body only	With No. 3200 Flange attached	Std. Pkg.
22	2 Light Multiple	\$1 25	\$1 35	24
23	3 Light Multiple	1 50	1 60	24
24	4 Light Multiple	1 75	1 85	24

For special finishes see page 63.

The Cluster attaches to ceiling with ordinary wood screws and any of the *Special Metal Reflectors* (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3223 Flange, made to fit Bossert boxes.

Where it is desired to use this Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3200 Flange will be attached at factory if so ordered.

Style 2 Flange Backs with Screws Attached



Tapped $\frac{3}{8}$ -inch—Cat. No. 3200



Cat. No. 3223



Tapped $\frac{1}{2}$ -inch—Cat. No. 3250

Paper washers are used under heads of screws to protect the porcelain base.

Cat. No.		List Price	Std. Pkg.
3200	Flange tapped for $\frac{3}{8}$ -inch iron pipe	\$0 10	24
3223	Flange for attaching to 3-inch outlet box	.10	24
3224	Flange for attaching to 4-inch outlet box	.15	24
3250	Flange tapped for $\frac{1}{2}$ -inch iron pipe	.15	24

Multiple—Interior

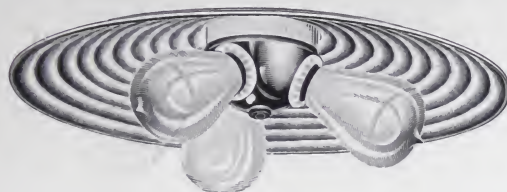
NATIONAL CODE STANDARD

9

Style 2 Cluster

Ceiling Forms—Continued

Cluster with
Reflector.
No Stem.



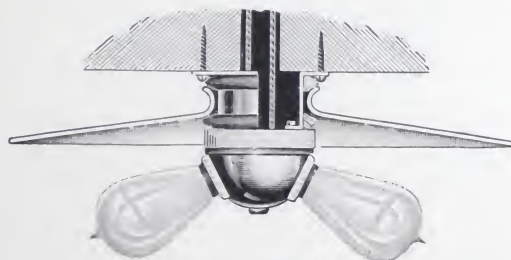
Metal Reflectors
used with ceiling
form (Style 2) fit
Cluster back and
are placed
between same
and ceiling.

Style 2 R

A214—14-inch Aluminum Reflector shown

Cat. No.	The Special Reflectors listed with following group fit Cluster back and require no holders	Price, complete.	Std Pkg.
22A	2 Light Multiple with A214 14-inch Aluminum Reflector	\$2.65	24
23A	3 Light Multiple with A214 14-inch Aluminum Reflector	2.90	24
24A	4 Light Multiple with A214 14-inch Aluminum Reflector	3.15	24
22M	2 Light Multiple with M214 14-inch Mirror Reflector	2.60	24
23M	3 Light Multiple with M214 14-inch Mirror Reflector	2.85	24
24M	4 Light Multiple with M214 14-inch Mirror Reflector	3.10	24
22T	2 Light Multiple with T214 14-inch Tin Reflector	1.75	24
23T	3 Light Multiple with T214 14-inch Tin Reflector	2.00	24
24T	4 Light Multiple with T214 14-inch Tin Reflector	2.25	24
22H	2 Light Multiple with H214 14-inch Enameled Reflector.	3 25	24
23H	3 Light Multiple with H214 14-inch Fnameled Reflector.	3 50	24
24H	4 Light Multiple with H214 14-inch Enameled Reflector.	3 75	24

Cluster with
No. 200
Sub-base
and
Reflector.



The rubber rings
on the sub-base
form a bearing
surface for the
Reflector and pre-
vent its contact
with metal at any
point, thereby
lessening
breakage.

Style 200 R

P32514—14-inch Opal Reflector shown

Cat. No.		List Price, complete	Std Pkg
20022	2 Lt. Multiple with No. 200 Sub-base, no Reflector	\$1 95	24
20023	3 Lt. Multiple with No. 200 Sub-base, no Reflector	2 20	24
20024	4 Lt. Multiple with No. 200 Sub-base, no Reflector	2 45	24
20022P	2 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector	2 55	24
20023P	3 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector	2 80	24
20024P	4 Lt. Mult. with No. 200 Sub-base and P32514 14-in. Opal Reflector	3 05	24
20022X	2 Lt. Mult. with No. 200 Sub-base and X32514 14-in. X-Ray Reflector	3 95	24
20023X	3 Lt. Mult. with No. 200 Sub-base and X32514 14-in. X-Ray Reflector	4 20	24
20024X	4 Lt. Mult. with No. 200 Sub-base and X32514 14-in. X-Ray Reflector	4 45	24

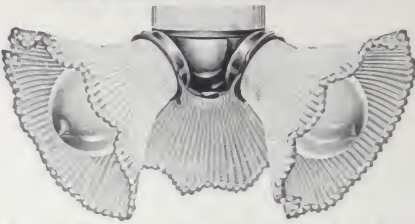
For Sub-base see page 57.
For Reflectors see page 62.

Multiple—Interior

NATIONAL CODE STANDARD

Style 2 Cluster

Cluster with individual shades for each lamp opening.



Ceiling Forms

Continued

Cluster attaches directly against ceiling without stem.

Style 2S D1505—Pagoda Shades shown

Cat. No.		Appropriate shade holders are included	List Price, complete.	Std. Pkg.
22G	2 Light Multiple with	G2255 2½x5 Opal Shades	\$1.85	24
22N	2 Light Multiple with	N2256 2½x6 X-Ray Shades	3 45	24
22V	2 Light Multiple with	V1505 1½x5 Pagoda Shades	2 95	24
22D	2 Light Multiple with	D1506 1½x5 Diffusing Shades.	3 05	24
23G	3 Light Multiple with	G2255 2½x5 Opal Shades	2.40	24
23N	3 Light Multiple with	N2256 2½x6 X-Ray Shades	4 80	24
23V	3 Light Multiple with	V1505 1½x5 Pagoda Shades	4 05	24
23D	3 Light Multiple with	D1506 1½x5 Diffusing Shades.	4.20	24
24G	4 Light Multiple with	G2255 2½x5 Opal Shades	2 95	24
24N	4 Light Multiple with	N2256 2½x6 X-Ray Shades	6 15	24
24V	4 Light Multiple with	V1505 1½x5 Pagoda Shades	5 15	24
24D	4 Light Multiple with	D1506 1½x5 Diffusing Shades	5.35	24

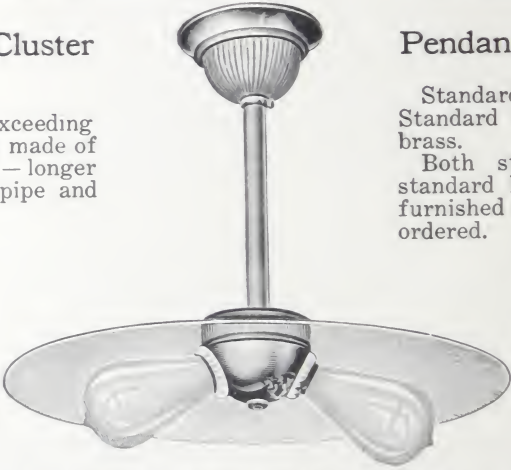
For Shade Holders see page 59.

For Shades see page 61.

Style 2 Cluster

Fixture stems (not exceeding 36 inch length) will be made of ¾ inch brass tubing—longer lengths ¾ inch iron pipe and ¾ inch brass casing.

Low canopy and crowfoot are furnished unless otherwise ordered.



Pendant Forms

Standard length stem 8 inch. Standard finish—Polished brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$.70 to the following list prices.

Cat. No.		Style 02 R T214—14-inch Tin Reflector shown	List Price, complete.	Std. Pkg.
022	2 Light Multiple without	Reflectors or Holders	\$1.95	
023	3 Light Multiple without	Reflectors or Holders	2.20	
024	4 Light Multiple without	Reflectors or Holders	2.45	
Appropriate shade holders are included in the following				
022P	2 Light Multiple with	P32514 14-inch Porcelain Reflector	2.85	24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.
022X	2 Light Multiple with	X32514 14-inch X-Ray Reflector	4 25	
022E	2 Light Multiple with	E32514 14-inch Diffusing Reflector	4 65	
023P	3 Light Multiple with	P32514 14-inch Porcelain Reflector	3.10	
023X	3 Light Multiple with	X32514 14-inch X-Ray Reflector	4 50	
023E	3 Light Multiple with	E32514 14-inch Diffusing Reflector	4 90	
024P	4 Light Multiple with	P32514 14-inch Porcelain Reflector	3.35	
024X	4 Light Multiple with	X32514 14-inch X-Ray Reflector	4 75	
024E	4 Light Multiple with	E32514 14-inch Diffusing Reflector	5 15	

ADDITIONAL LENGTH STEM—Lengths up to 36-inch (¾-inch brass tubing), 30c ft. list. Over 36 inches long (¾-inch iron pipe and casing), 45c ft. list.

For Reflectors see page 62

Multiple—Interior

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NATIONAL CODE STANDARD

Style 2 Cluster

Pendant Forms—Continued

Cat. No.	The Special Reflectors in following group fit Cluster back and require no holders.		Price List, complete	Std. Pkg.
022A	2 Light Multiple with	A214 14-inch Aluminum Reflector . . .	\$3 35	
022M	2 Light Multiple with	M214 14-inch Mirror Reflector	3 30	
022T	2 Light Multiple with	T214 14-inch Tin Reflector	2 45	
022H	2 Light Multiple with	H214 14-inch Enameled Steel Reflector . .	3 95	
023A	3 Light Multiple with	A214 14-inch Aluminum Reflector . . .	3 60	
023M	3 Light Multiple with	M214 14-inch Mirror Reflector	3 55	
023T	3 Light Multiple with	T214 14-inch Tin Reflector	2 70	
023H	3 Light Multiple with	H214 14-inch Enameled Steel Reflector .	4 20	
024A	4 Light Multiple with	A214 14-inch Aluminum Reflector . . .	3 85	
024M	4 Light Multiple with	M214 14-inch Mirror Reflector	3 80	
024T	4 Light Multiple with	T214 14-inch Tin Reflector	2 95	
024H	4 Light Multiple with	H214 14-inch Enameled Steel Reflector .	4 45	

24 assorted Cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.

For Reflectors see page 62.



Fixture stems not exceeding 36-inch length will be made of $\frac{5}{8}$ -inch brass tubing—longer lengths of $\frac{3}{4}$ -inch iron pipe and $\frac{3}{4}$ -inch brass casing.

Low canopy and crow-foot are furnished unless otherwise specified.

Standard length stem 8 inch.
Standard finish Polished Brass.

Both standard finish and standard length stem will be furnish unless otherwise ordered.

For deep canopy and insulating joint add \$.70 to the following list prices.

Style 02S

N2256—X-Ray Shades shown

Cat. No.		List Price, complete	Std. Pkg.
022	2 Light Multiple without Shades or Holders	\$1 95	
023	3 Light Multiple without Shades or Holders	2 20	
024	4 Light Multiple without Shades or Holders	2 45	

Appropriate Shade Holders are included

022G	2 Light Multiple with	G2255 2½x5 Opal Shades	2 55
022N	2 Light Multiple with	N2256 2½x6 X-Ray Shades	4 15
022V	2 Light Multiple with	V1505 1½x5 Pagoda Shades	3 65
022D	2 Light Multiple with	D1506 1½x5 Diffusing Shades	3 75
023G	3 Light Multiple with	G2255 2½x5 Opal Shades	3 10
023N	3 Light Multiple with	N2256 2½x6 X-Ray Shades	5 50
023V	3 Light Multiple with	V1505 1½x5 Pagoda Shades	4 75
023D	3 Light Multiple with	D1506 1½x5 Diffusing Shades	4 90
024G	4 Light Multiple with	G2255 2½x5 Opal Shades	3 65
024N	4 Light Multiple with	N2256 2½x6 X-Ray Shades	6 85
024V	4 Light Multiple with	V1505 1½x5 Pagoda Shades	5 85
024D	4 Light Multiple with	D1506 1½x5 Diffusing Shades	6 05

24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package

For Shades see page 61. For Shade Holders see page 59.

ADDITIONAL LENGTH STEM—Lengths up to 36-inch ($\frac{5}{8}$ -inch brass tubing) 30c ft. list Longer Stems ($\frac{3}{4}$ -inch iron pipe and casing) 45c ft. list.

Benjamin Wireless Clusters

180 of Them Installed in
This Building



THE HENRY SIEGEL BUILDING—BOSTON

Among other Boston Buildings containing installations of Benjamin Wireless Clusters are the following .

THE HENRY WALKER BUILDING
THE MONKS BUILDING AND
THE JOHN HANCOCK BUILDING

Multiple—Interior

13

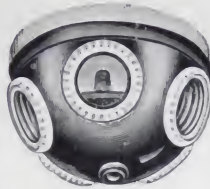
NATIONAL CODE STANDARD

Style 1 Cluster

Ceiling Form

Fibre lined.

Bushing at lowest point has a knock-out center to accommodate lamp cord for drop light or pendant switch.



Polished brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style 1 Cluster

4-inch diameter

Cat. No.	Put up 6 in a box	Cluster body only.	With No. 3100 Flange attached.	Std. Pkg.
12	2 Light Multiple	\$1 50	\$1 65	12
13	3 Light Multiple	1 75	1 90	12
14	4 Light Multiple	2 00	2 15	12
15	5 Light Multiple	2 25	2 40	24
16	6 Light Multiple	2 50	2 65	24

For special finishes see page 63.

The Cluster attaches to ceiling with ordinary wood screws and any of the *Special Metal Reflectors* (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3123 Flange made to fit Bossert boxes.

Where it is desired to use the Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3100 Flange will be attached at factory if so ordered.

Style 1 Flange Backs with Screws Attached



Tapped $\frac{3}{8}$ -inch—Cat. No. 3100



Cat. No. 3124



Tapped $\frac{1}{2}$ -inch—Cat. No. 3150

Paper washers are used under heads of screws, also between flange and cluster base, to prevent porcelain from breaking.

Cat. No.		List Price	Std. Pkg.
3100	Flange tapped for $\frac{3}{8}$ -inch pipe	\$0 15	24
3123	Flange for attaching to 3-inch outlet box	15	24
3124	Flange for attaching to 4-inch outlet box	15	24
3150	Flange tapped for $\frac{1}{2}$ -inch pipe	20	24
3175	Flange tapped for $\frac{3}{4}$ -inch pipe	20	24

Multiple—Interior

NATIONAL CODE STANDARD

Style 1 Cluster

Ceiling Forms—Continued

Cluster with
Reflector.
No Stem.
For Reflectors
see page 62.



Metal Reflectors
used with ceiling
form (Style 1) fit
Cluster back and
are placed
between same
and ceiling.

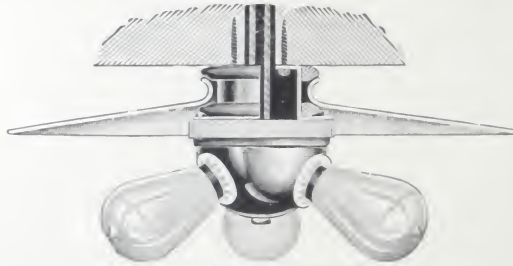
Style 1 R

A114—14 inch Mirror Reflector shown

The Special Reflectors listed with following group fit Cluster back
and require no holders

Cat. No.		List Price, complete	Std. Pkg.
12A	2 Light Multiple with A114 14-inch Aluminum Reflector	\$2 90	12
13A	3 Light Multiple with A114 14-inch Aluminum Reflector	3 15	12
14A	4 Light Multiple with A114 14-inch Aluminum Reflector	3 40	12
15A	5 Light Multiple with A114 14-inch Aluminum Reflector	3 65	24
16A	6 Light Multiple with A114 14-inch Aluminum Reflector	3 90	24
12M	2 Light Multiple with M114 14-inch Mirror Reflector	2 85	12
13M	3 Light Multiple with M114 14-inch Mirror Reflector	3 10	12
14M	4 Light Multiple with M114 14-inch Mirror Reflector	3 35	12
15M	5 Light Multiple with M114 14-inch Mirror Reflector	3 60	24
16M	6 Light Multiple with M114 14-inch Mirror Reflector	3 85	24
12T	2 Light Multiple with T114 14-inch Tin Reflector	2 00	12
13T	3 Light Multiple with T114 14-inch Tin Reflector	2 25	12
14T	4 Light Multiple with T114 14-inch Tin Reflector	2 50	12
15T	5 Light Multiple with T114 14-inch Tin Reflector	2 75	24
16T	6 Light Multiple with T114 14-inch Tin Reflector	3 00	24
12H	2 Light Multiple with H114 14-inch Enameled Steel Reflector	3 50	12
13H	3 Light Multiple with H114 14-inch Enameled Steel Reflector	3 75	12
14H	4 Light Multiple with H114 14-inch Enameled Steel Reflector	4 00	12
15H	5 Light Multiple with H114 14-inch Enameled Steel Reflector	4 25	24
16H	6 Light Multiple with H114 14-inch Enameled Steel Reflector	4 50	24

Cluster with
No. 100
Sub-base and
Reflector.
For Sub-base
see page 57.



The rubber rings on
the Sub-base form a
bearing surface for
the Reflector and
prevent its contact
with metal at any
point, thereby lessen-
ing breakage.

Style 100 R

P32514—14 inch Opal Reflector shown

Cat. No.		List Price complete,	Std. Pkg.
10012	2 Lt. Mult. with No. 100 Sub-base, no Reflector	\$2 20	12
10013	3 Lt. Mult. with No. 100 Sub-base, no Reflector	2 45	12
10014	4 Lt. Mult. with No. 100 Sub-base, no Reflector	2 70	12
10015	5 Lt. Mult. with No. 100 Sub-base, no Reflector	2 95	24
10016	6 Lt. Mult. with No. 100 Sub-base, no Reflector	3 20	24
10012P	2 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	2 80	12
10013P	3 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.05	12
10014P	4 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.30	12
10015P	5 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3 55	24
10016P	6 Lt. Mult. with No. 100 Sub-base and P32514 14-in. Opal Reflector	3.80	24
10012X	2 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflector	4.20	12
10013X	3 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflector	4.45	12
10014X	4 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflector	4.70	12
10015X	5 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflector	4.95	24
10016X	6 Lt. Mult. with No. 100 Sub-base and X32514 14-in. X-Ray Reflector	5.20	24

Multiple—Interior

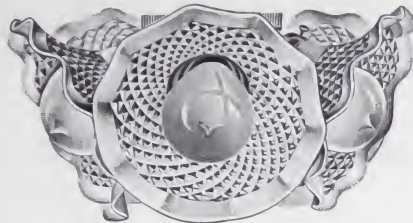
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NATIONAL CODE STANDARD

Style 1 Cluster

Ceiling Forms—Continued

Cluster with
Individual Shades
for each Lamp
Opening



Cluster attaches
directly against
ceiling without
stem

Style 1S

N2256—X-Ray shades shown

Can be used with stem by using No. 3100 flange.

Cat. No.	Appropriate Shade Holders are included	List Price, complete	Std Pkg
12G	2 Light Multiple with G2255 2½x5 Opal Shades	\$2.10	12
12N	2 Light Multiple with N2256 2½x6 X-Ray Shades	3.70	12
12V	2 Light Multiple with V1505 1½x5 Pagoda Shades	3.20	12
12D	2 Light Multiple with D1506 1½x5 Diffusing Shades	3.30	12
13G	3 Light Multiple with G2255 2½x5 Opal Shades	2.65	12
13N	3 Light Multiple with N2256 2½x6 X-Ray Shades	5.05	12
13V	3 Light Multiple with V1505 1½x5 Pagoda Shades	4.30	12
13D	3 Light Multiple with D1506 1½x5 Diffusing Shades	4.45	12
14G	4 Light Multiple with G2255 2½x5 Opal Shades	3.20	12
14N	4 Light Multiple with N2256 2½x6 X-Ray Shades	6.40	12
14V	4 Light Multiple with V1505 1½x5 Pagoda Shades	5.40	12
14D	4 Light Multiple with D1506 1½x5 Diffusing Shades	5.60	12
15G	5 Light Multiple with G2255 2½x5 Opal Shades	3.75	24
15N	5 Light Multiple with N2256 2½x6 X-Ray Shades	7.75	24
15V	5 Light Multiple with V1505 1½x5 Pagoda Shades	6.50	24
15D	5 Light Multiple with D1506 1½x5 Diffusing Shades	6.75	24
*16V	6 Light Multiple with V1505 1½x5 Pagoda Shades	7.60	24

*Other standard shades are of too large diameter to permit their use with Style 1 6 light cluster.

For Shade Holders see page 59.

For Shades see page 61

Multiple—Interior

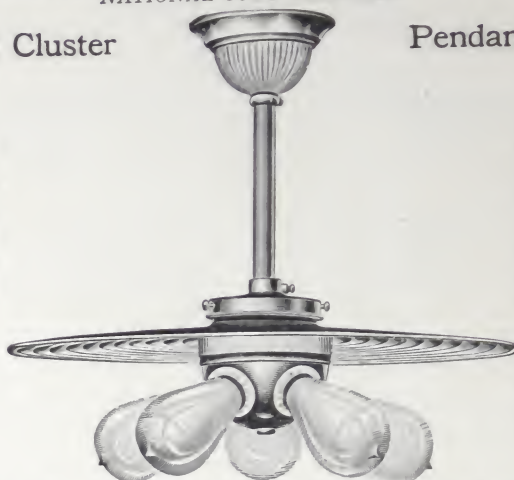
NATIONAL CODE STANDARD

Style 1 Cluster

Pendant Forms

Fixture stems (not exceeding 36 inch length) will be made of $\frac{3}{8}$ -inch brass tubing, longer lengths of $\frac{3}{8}$ -inch iron pipe and $\frac{3}{4}$ -inch brass casing.

Low canopy and crowfoot are furnished unless otherwise ordered.



Standard length stem, 8 inch.

Standard finish, polished brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$.70 to the following list prices.

Cat No	Style O1 R	X32514—14 inch X-Ray Reflector Shown	List Price, complete.	Std. Pkg.
012	2 Light Multiple without Reflector or Holder		\$2 25	
013	3 Light Multiple without Reflector or Holder		2 50	
014	4 Light Multiple without Reflector or Holder		2 75	
015	5 Light Multiple without Reflector or Holder		3 00	
016	6 Light Multiple without Reflector or Holder		3 25	
Appropriate Shade Holders are included in the following				
012P	2 Light Multiple with P32514 14-inch Porcelain Reflector		3.15	
012X	2 Light Multiple with X32514 14-inch X-Ray Reflector		4 55	
012E	2 Light Multiple with E32514 14-inch Diffusing Reflector		4 95	
013P	3 Light Multiple with P32514 14-inch Porcelain Reflector		3 40	
013X	3 Light Multiple with X32514 14-inch X-Ray Reflector		4 80	
013E	3 Light Multiple with E32514 14-inch Diffusing Reflector		5.20	
014P	4 Light Multiple with P32514 14-inch Porcelain Reflector		3 65	
014X	4 Light Multiple with X32514 14-inch X-Ray Reflector		5 05	
014E	4 Light Multiple with E32514 14-inch Diffusing Reflector		5.45	
015P	5 Light Multiple with P32514 14-inch Porcelain Reflector		3 90	
015X	5 Light Multiple with X32514 14-inch X-Ray Reflector		5 30	
015E	5 Light Multiple with E32514 14-inch Diffusing Reflector		5.70	
016P	6 Light Multiple with P32514 14-inch Porcelain Reflector		4.15	
016X	6 Light Multiple with X32514 14-inch X-Ray Reflector		5 55	
016E	6 Light Multiple with E42514 14-inch Diffusing Reflector		5.95	
The Special Reflectors in the following group fit between Cluster Base and Flange				
012A	2 Light Multiple with A114 14-inch Aluminum Reflector		\$3.65	
012M	2 Light Multiple with M114 14-inch Mirror Reflector		3.60	
012T	2 Light Multiple with T114 14-inch Tin Reflector		2.75	
013A	3 Light Multiple with A114 14-inch Aluminum Reflector		3 90	
013M	3 Light Multiple with M114 14-inch Mirror Reflector		3 85	
013T	3 Light Multiple with T114 14-inch Tin Reflector		3 00	
014A	4 Light Multiple with A114 14 inch Aluminum Reflector		4 15	
014M	4 Light Multiple with M114 14-inch Mirror Reflector		4.10	
014T	4 Light Multiple with T114 14-inch Tin Reflector		3.25	
015A	5 Light Multiple with A114 14-inch Aluminum Reflector		4.40	
015M	5 Light Multiple with M114 14-inch Mirror Reflectors		4 35	
015T	5 Light Multiple with T114 14-inch Tin Reflector		3 50	
016A	6 Light Multiple with A114 14-inch Aluminum Reflector		4.65	
016M	6 Light Multiple with M114 14-inch Mirror Reflector		4 60	
016T	6 Light Multiple with T114 14-inch Tin Reflector		3 75	

For Shade Holders see page 59.

For Reflectors see page 62.

ADDITIONAL LENGTH STEM. Lengths up to 36-inch ($\frac{3}{8}$ -inch brass tubing), 30c foot, list. Over 36 inches long ($\frac{3}{8}$ -inch iron pipe and casing), 45c foot, list.

24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.

Multiple—Interior

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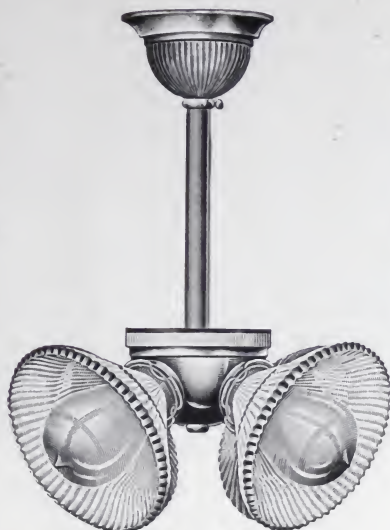
NATIONAL CODE STANDARD

Style 1 Cluster

Pendant Forms—Continued

Fixture stems (not exceeding 36-inch length) will be made of $\frac{1}{2}$ -inch brass tubing, longer lengths of $\frac{1}{2}$ -inch iron pipe and $\frac{1}{2}$ -inch brass casing.

Low Canopy and Crowfoot are furnished unless otherwise specified.



Standard length stem, 8-inch.

Standard finish, Polished Brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For Deep Canopy and Insulating Joint add 70c to the following list prices.

Style 01 S

D1506 Diffusing Shades shown

Cat No.		List Price, complete	Std Pkg
012	2 Light Multiple without Shades or Holders .	\$2.25	
013	3 Light Multiple without Shades or Holders	2.50	
014	4 Light Multiple without Shades or Holders	2.75	
015	5 Light Multiple without Shades or Holders . .	3.00	
016	6 Light Multiple without Shades or Holders . . .	3.25	
Appropriate Shade Holders are included with the following.			
012G	2 Light Multiple with G2255 2 $\frac{1}{2}$ x5 Opal Shades	2.85	
012N	2 Light Multiple with N2256 2 $\frac{1}{2}$ x6 X-Ray Shades	4.45	
012V	2 Light Multiple with V1505 1 $\frac{1}{2}$ x5 Pagoda Shades	3.95	
012D	2 Light Multiple with D1506 1 $\frac{1}{2}$ x5 Diffusing Shades	4.05	
013G	3 Light Multiple with G2255 2 $\frac{1}{2}$ x5 Opal Shades	3.40	
013N	3 Light Multiple with N2256 2 $\frac{1}{2}$ x6 X-Ray Shades	5.80	
013V	3 Light Multiple with V1505 1 $\frac{1}{2}$ x5 Pagoda Shades	5.05	
013D	3 Light Multiple with D1506 1 $\frac{1}{2}$ x5 Diffusing Shades	5.20	
014G	4 Light Multiple with G2255 2 $\frac{1}{2}$ x5 Opal Shades	3.95	
014N	4 Light Multiple with N2256 2 $\frac{1}{2}$ x6 X-Ray Shades	7.15	
014V	4 Light Multiple with V1505 1 $\frac{1}{2}$ x5 Pagoda Shades	6.15	
014D	4 Light Multiple with D1506 1 $\frac{1}{2}$ x5 Diffusing Shades	6.35	
015G	5 Light Multiple with G2255 2 $\frac{1}{2}$ x5 Opal Shades	4.50	
015N	5 Light Multiple with N2256 2 $\frac{1}{2}$ x6 X-Ray Shades	8.50	
015V	5 Light Multiple with V1505 1 $\frac{1}{2}$ x5 Pagoda Shades	7.25	
015D	5 Light Multiple with D1506 1 $\frac{1}{2}$ x5 Diffusing Shades	7.50	
*016V	6 Light Multiple with V1505 1 $\frac{1}{2}$ x5 Pagoda Shades	8.35	

24 Assorted Cluster Fixtures, with or without Shades, or Reflectors, but complete with Stems and Canopies, constitute a Standard Package.

*Other Standard Shades are of too large diameter to permit their use with Style 1 6-Light Cluster.

For Shade Holders see page 59

For Shades see page 61

Installations of Benjamin Wireless Clusters



Chicago Post Office, in which a quantity of Benjamin Wireless Clusters are being installed.



A Jewelry Store in St. Joseph, Mo., lighted by Benjamin Arc Burst Cluster.

Multiple—Interior

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NATIONAL CODE STANDARD

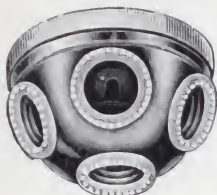
Style K Clusters

Ceiling Form

The Style K Cluster (having a central lamp opening) has become a very popular form of Cluster owing to the variety of attractive forms into which it can be made and the various uses to which it can be put.

This form of Cluster can be furnished with a 3-wire connection (which you may designate by the letter Y following Cat. No.), whereby the center lamp can be controlled independent of the side lights by means of a suitable switch or switches.

Fibre
lined



Polished brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style K Cluster

4-inch diameter

Cat. No.	Put up 6 in a box	Cluster body only.	With No 3100 Flange attached.	Std. Pkg.
13K	3 Light Multiple	\$1.80	\$1.95	12
14K	4 Light Multiple	2.05	2.20	24
15K	5 Light Multiple	2.30	2.45	24
16K	6 Light Multiple	2.55	2.70	24
17K	7 Light Multiple	2.80	2.95	24

For 3-wire (Y) connections add 25c to list price.

For special finishes see page 63.

The Cluster attaches to the ceiling with ordinary wood screws and any of the *Special Metal Reflectors* (of corresponding style No.) fit Cluster back without holders.

This Cluster can be attached direct to outlet box by using No. 3124 Flange made to fit Bossert boxes.

Where it is desired to use this Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3100 Flange will be attached at factory if so ordered.

Style K Flange Backs with Screws Attached



Tapped $\frac{3}{8}$ -inch—Cat. No. 3100



Cat. No. 3124



Tapped $\frac{1}{2}$ -inch—Cat. No. 3150

Paper washers are used under heads of screws to protect the porcelain base.

Cat. No.		List Price	Std. Pkg.
3100	Flange tapped for $\frac{3}{8}$ -inch pipe	\$0.15	24
3123	Flange for attaching to 3-inch outlet box	.15	24
3124	Flange for attaching to 4-inch outlet box	.15	24
3150	Flange tapped for $\frac{1}{2}$ -inch pipe	.20	24
3175	Flange tapped for $\frac{3}{4}$ -inch pipe	.20	24

Ceiling Forms—Interior

Cluster with Concentric Diffuser

This Diffuser is 26 inches in diameter, is ornamental in design and is made of steel with Austrian air dried enamel which does not turn yellow.

The form of this Diffuser is such as to distribute the light over a large area, and the center is made to receive a Style K Cluster of from 3 to 7 lights.



Style K C.

This fixture can be suspended from ceiling by using a suitable stem. Prices are for diffuser, cluster, flange, short nipple and crowfoot for ceiling connection.

Any style or make of lamps may be used, but frosted meridian type lamps produce the best effect.

Cluster complete less lamps

Cat. No.		List Price	Std. Pkg.
13KC	3 Light Multiple, complete less lamps	\$8.60	12
14KC	4 Light Multiple, complete less lamps	8.85	12
15KC	5 Light Multiple, complete less lamps	9.10	12
16KC	6 Light Multiple, complete less lamps	9.35	12
17KC	7 Light Multiple, complete less lamps	9.60	12

These Clusters can be furnished with a Turn Down (Y connection) for which add 25c to list price.

For description of Turn Down feature see page 30.

Multiple—Interior

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Style K Cluster

Ceiling Form

Cluster with individual shades for each lamp opening.



Cluster attaches directly against ceiling without stem.

For other attaching means see page 19

Style K S

D1506 Diffusing shades shown

Cat. No.	Appropriate Shade Holders are included	List Price, complete	Std Pkg
13KG	3 Light Multiple with G2255 2½x5 Opal Shades	\$2.70	24 assorted cluster fixtures with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.
13KN	3 Light Multiple with N2256 2½x6 X-Ray Shades	5.10	
13KV	3 Light Multiple with V1505 1½x5 Pagoda Shades	4 35	
13KD	3 Light Multiple with D1506 1½x5 Diffusing Shades	4.50	
14KG	4 Light Multiple with G2255 2½x5 Opal Shades	3.25	
14KN	4 Light Multiple with N2256 2½x6 X-Ray Shades	6 45	
14KV	4 Light Multiple with V1505 1½x5 Pagoda Shades	5 45	
14KD	4 Light Multiple with D1506 1½x5 Diffusing Shades	5 65	
15KG	5 Light Multiple with G2255 2½x5 Opal Shades	3 80	
15KN	5 Light Multiple with N2256 2½x6 X-Ray Shades	7 80	
15KV	5 Light Multiple with V1505 1½x5 Pagoda Shades	6 55	
15KD	5 Light Multiple with D1506 1½x5 Diffusing Shades	6 80	
16KG	6 Light Multiple with G2255 2½x5 Opal Shades	4.35	
16KN	6 Light Multiple with N2256 2½x6 X-Ray Shades	9.15	
16KV	6 Light Multiple with V1505 1½x5 Pagoda Shades	7.65	
16KD	6 Light Multiple with D1506 1½x5 Diffusing Shades	7.95	
*17KV	7 Light Multiple with V1505 Pagoda Shades	8 75	

*Other Standard Shades are of too large diameter to permit their use with Style K 7 Light Cluster.

For Shade Holders see page 59

For Shades see page 61

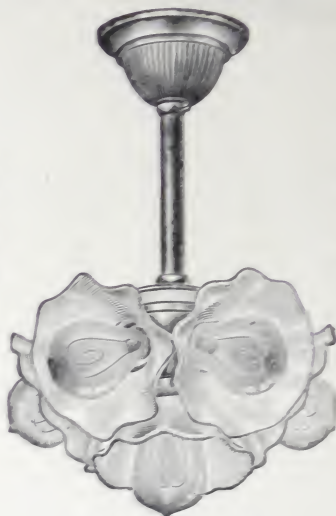
Multiple—Interior

Style K Cluster

Pendant Form

Fixture stems not exceeding 36-inch length will be made of $\frac{1}{4}$ -inch brass tubing, longer lengths of $\frac{1}{2}$ -inch iron pipe and $\frac{1}{2}$ -inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.



Style OK S

Standard length stem—8-inch.

Standard finish—polished brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add 70c to the following list prices.

Cat. No.	G2255—Opal Shades Shown			List Price Complete	Std. Pkg.
013K	3	Light Multiple without Shades or Holders		\$2 55	
014K	4	Light Multiple without Shades or Holders		2 80	
015K	5	Light Multiple without Shades or Holders		3 05	
016K	6	Light Multiple without Shades or Holders		3 30	
017K	7	Light Multiple without Shades or Holders		3 55	
Appropriate shade holders are furnished with the following					
013KG	3	Light Multiple with G2255 2½x5 Opal Shades		3 45	
013KN	3	Light Multiple with N2256 2½x6 X-Ray Shades		5 85	
013KV	3	Light Multiple with V1505 1½x5 Pagoda Shades		5 10	
013KD	3	Light Multiple with D1506 1½x5 Diffusing Shades		5 25	
014KG	4	Light Multiple with G2255 2½x5 Opal Shades		4 00	
014KN	4	Light Multiple with N2256 2½x6 X-Ray Shades		7 20	
014KV	4	Light Multiple with V1505 1½x5 Pagoda Shades		6 20	
014KD	4	Light Multiple with D1506 1½x5 Diffusing Shades		6 40	
015KG	5	Light Multiple with G2255 2½x5 Opal Shades		4 55	
015KN	5	Light Multiple with N2256 2½x6 X-Ray Shades		8 55	
015KV	5	Light Multiple with V1505 1½x5 Pagoda Shades		7 30	
015KD	5	Light Multiple with D1506 1½x5 Diffusing Shades		7 55	
016KG	6	Light Multiple with G2255 2½x5 Opal Shades		5 10	
016KN	6	Light Multiple with N2256 2½x6 X-Ray Shades		9 90	
016KV	6	Light Multiple with V1505 1½x5 Pagoda Shades		8 40	
016KD	6	Light Multiple with D1506 1½x5 Diffusing Shades		8 70	
*017KV	7	Light Multiple with V1505 1½x5 Pagoda Shades		9 50	

*Most Standard shades are of too large diameter to permit their use with Style K7 Light Cluster.

For Shade Holders see page 59.

For Shades see page 61.

ADDITIONAL LENGTH STEM Lengths up to 36-inch ($\frac{1}{4}$ -inch brass tubing), 30c foot, list; over 36 inches long ($\frac{1}{2}$ -inch iron pipe and casing), 45c foot, list.

24 Assorted Cluster Fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a standard package.

Multiple—Interior

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NATIONAL CODE STANDARD

Style 7 Cluster

Ceiling Form

Style 7 is the same as Style 1 with an indicating single pole snap switch added.

This switch has a metal key and is not affected by the heat of the lamps.



Polished Brass is standard finish and will be furnished unless otherwise ordered.

Made in Edison base only.

Style 7 Cluster

4-inch diameter

Put up 6 in a box

Cat. No.		Cluster body only	With No. 31 Flange attached	Std. Pkg.
72	2 Light Multiple	\$2.50	\$2.65	12
73	3 Light Multiple	2.75	2.90	12
74	4 Light Multiple	3.00	3.15	12
75	5 Light Multiple	3.25	3.40	12
76	6 Light Multiple	3.50	3.65	12

The Cluster attaches to ceiling with ordinary wood screws and any of the *Special Metal Reflectors* (of corresponding style No.) fit Cluster back without shade holders.

This Cluster can be attached direct to outlet box by using No. 3124 Flange made to fit Bossert boxes.

Where it is desired to use the Cluster in pendant form it is necessary to attach one of the following Flanges. No. 3100 Flange will be attached at factory if so ordered.

Style 7 Flange Backs with Screws Attached



Tapped 1/2-inch—Cat. No. 3100



Cat. No. 3124



Tapped 1/2-inch—Cat. No. 3150

Paper washers are used under heads of screws to protect the porcelain base.

Cat. No.		List Price each	Std. Pkg.
3100	Flange tapped for 1/2-inch pipe	\$0.15	24
3123	Flange for attaching to 3-inch outlet box . . . . .	.15	24
3124	Flange for attaching to 4-inch outlet box . . . . .	.15	24
3150	Flange tapped for 1/2-inch pipe . . . . .	.20	24
3175	Flange tapped for 1/2-inch pipe . . . . .	.20	24

Multiple—Interior

NATIONAL CODE STANDARD

Style 7 Cluster

Ceiling Forms

Cluster with
Reflector.

For Reflectors
see page 62.



Style 7 R

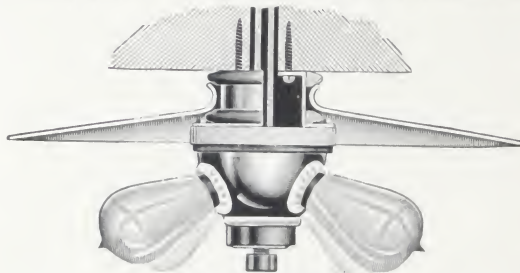
Metal Reflectors
used with ceiling
form (Style 7)
fit Cluster back
and are placed
between same
and ceiling.

T114—14-inch Tin Reflector shown

Cat. No.			List Price, complete	Std. Pkg.
72A	2 Light Multiple with A114	14-inch Aluminum Reflector . . .	\$3.90	12
73A	3 Light Multiple with A114	14-inch Aluminum Reflector . . .	4.15	12
74A	4 Light Multiple with A114	14-inch Aluminum Reflector . . .	4.40	12
75A	5 Light Multiple with A114	14-inch Aluminum Reflector . . .	4.65	12
76A	6 Light Multiple with A114	14-inch Aluminum Reflector . . .	4.90	12
72M	2 Light Multiple with M114	14-inch Mirror Reflector . . .	3.85	12
73M	3 Light Multiple with M114	14-inch Mirror Reflector . . .	4.10	12
74M	4 Light Multiple with M114	14-inch Mirror Reflector . . .	4.35	12
75M	5 Light Multiple with M114	14-inch Mirror Reflector . . .	4.60	12
76M	6 Light Multiple with M114	14-inch Mirror Reflector . . .	4.85	12
72T	2 Light Multiple with T114	14-inch Tin Reflector . . .	3.00	12
73T	3 Light Multiple with T114	14-inch Tin Reflector . . .	3.25	12
74T	4 Light Multiple with T114	14-inch Tin Reflector . . .	3.50	12
75T	5 Light Multiple with T114	14-inch Tin Reflector . . .	3.75	12
76T	6 Light Multiple with T114	14-inch Tin Reflector . . .	4.00	12
72H	2 Light Multiple with H114	14-inch Enameled Steel Reflector . . .	4.50	12
73H	3 Light Multiple with H114	14-inch Enameled Steel Reflector . . .	4.75	12
74H	4 Light Multiple with H114	14-inch Enameled Steel Reflector . . .	5.00	12
75H	5 Light Multiple with H114	14-inch Enameled Steel Reflector . . .	5.25	12
76H	6 Light Multiple with H114	14-inch Enameled Steel Reflector . . .	5.50	12

Cluster with
No. 100
Sub-base and
Reflector.

For Sub-base
see page 57.



Style 700 R

The rubber rings
on the Sub-base
form a bearing
surface for the
Reflector and
prevent its contact
with metal at any
point, thereby
lessening
breakage.

P32514—14-inch Opal Reflector shown

Cat. No.			List Price, complete	Std. Pkg.
10072	2 Lt. Mult. with No. 100	Sub-base, no Reflector . . .	\$3.20	12
10073	3 Lt. Mult. with No. 100	Sub-base, no Reflector . . .	3.45	12
10074	4 Lt. Mult. with No. 100	Sub-base, no Reflector . . .	3.70	12
10075	5 Lt. Mult. with No. 100	Sub-base, no Reflector . . .	3.95	12
10076	6 Lt. Mult. with No. 100	Sub-base, no Reflector . . .	4.20	12
10072P	2 Lt. Mult. with No. 100	Sub-base and P32514 14-in. Opal Reflector	3.80	12
10073P	3 Lt. Mult. with No. 100	Sub-base and P32514 14-in. Opal Reflector	4.05	12
10074P	4 Lt. Mult. with No. 100	Sub-base and P32514 14-in. Opal Reflector	4.30	12
10075P	5 Lt. Mult. with No. 100	Sub-base and P32514 14-in. Opal Reflector	4.55	12
10076P	6 Lt. Mult. with No. 100	Sub-base and P32514 14-in. Opal Reflector	4.80	12
10072X	2 Lt. Mult. with No. 100	Sub-base and X32514 14-in. X-Ray Reflector	5.20	12
10073X	3 Lt. Mult. with No. 100	Sub-base and X32514 14-in. X-Ray Reflector	5.45	12
10074X	4 Lt. Mult. with No. 100	Sub-base and X32514 14-in. X-Ray Reflector	5.70	12
10075X	5 Lt. Mult. with No. 100	Sub-base and X32514 14-in. X-Ray Reflector	5.95	12
10076X	6 Lt. Mult. with No. 100	Sub-base and X32514 14-in. X-Ray Reflector	6.20	12

Multiple—Interior

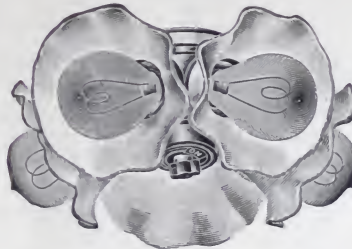
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NATIONAL CODE STANDARD

Style 7 Cluster

Ceiling Forms—Continued

Cluster with individual shades for each lamp opening.



Cluster attaches directly against ceiling without stem.

Style 7 S

G2255—Opal Shades shown.

Cat. No.	Appropriate Shade Holders are included.			List Price Complete	Std. Pkg
72G	2 Light Multiple with G2255 2½x5	Opal Shades		\$3 10	12
72N	2 Light Multiple with N2256 2½x6	X-Ray Shades		4 70	12
72V	2 Light Multiple with V1505 1½x5	Pagoda Shades		4 20	12
72D	2 Light Multiple with D1506 1½x5	Diffusing Shades		4 30	12
73G	3 Light Multiple with G2255 2½x5	Opal Shades		3 65	12
73N	3 Light Multiple with N2256 2½x6	X-Ray Shades		6 05	12
73V	3 Light Multiple with V1505 1½x5	Pagoda Shades		5 30	12
73D	3 Light Multiple with D1506 1½x5	Diffusing Shades		5.45	12
74G	4 Light Multiple with G2255 2½x5	Opal Shades		4 20	12
74N	4 Light Multiple with N2256 2½x6	X-Ray Shades		7 40	12
74V	4 Light Multiple with V1505 1½x5	Pagoda Shades		6 40	12
74D	4 Light Multiple with D1506 1½x5	Diffusing Shades		6 60	12
75G	5 Light Multiple with G2255 2½x5	Opal Shades		4 75	12
75N	5 Light Multiple with N2256 2½x6	X-Ray Shades		8 75	12
75V	5 Light Multiple with V1505 1½x5	Pagoda Shades		7 50	12
75D	5 Light Multiple with D1506 1½x5	Diffusing Shades		7.75	12
*76V	6 Light Multiple with V1505 1½x5	Pagoda Shades		8.60	12

*Other Standard Shades are of too large diameter to permit their use with Style 7 (6-Light) Cluster.

For other supporting means see page 23.

For Shade Holders see page 59.

For Shades see page 61.

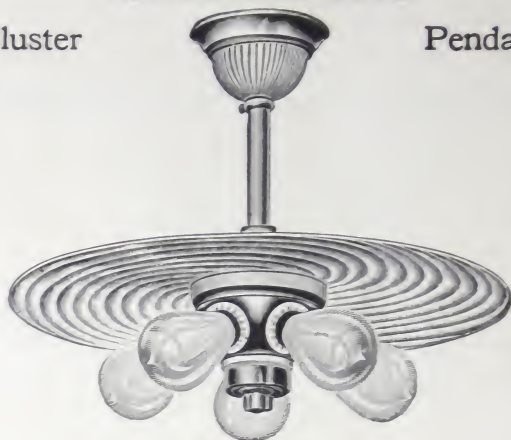
Multiple—Interior

NATIONAL CODE STANDARD

Style 7 Cluster

Fixture stems not exceeding 36 inch length will be made of $\frac{1}{2}$ -inch brass tubing; longer lengths of $\frac{1}{2}$ -inch iron pipe and $\frac{1}{2}$ -inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.



Pendant Forms

Standard length stem, 8 inches. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

Style 07 R

X32514—X-Ray Reflector shown

Cat. No		List Price, complete	Std. Pkg.
072	2 Light Multiple without Reflector or Holder	\$3.25	
073	3 Light Multiple without Reflector or Holder	3.50	
074	4 Light Multiple without Reflector or Holder	3.75	
075	5 Light Multiple without Reflector or Holder	4.00	
076	6 Light Multiple without Reflector or Holder	4.25	
Appropriate Shade Holders are included in following group			
072P	2 Light Multiple with P32514 14-inch Porcelain Reflector	4.15	
072X	2 Light Multiple with X32514 14-inch X-Ray Reflector	5.55	
072E	2 Light Multiple with E32514 14-inch Diffusing Reflector	5.95	
073P	3 Light Multiple with P32514 14-inch Porcelain Reflector	4.40	
073X	3 Light Multiple with X32514 14-inch X-Ray Reflector	5.80	
073E	3 Light Multiple with E32514 14-inch Diffusing Reflector	6.20	
074P	4 Light Multiple with P32514 14-inch Porcelain Reflector	4.65	
074X	4 Light Multiple with X32514 14-inch X-Ray Reflector	6.05	
074E	4 Light Multiple with E32514 14-inch Diffusing Reflector	6.45	
075P	5 Light Multiple with P32514 14-inch Porcelain Reflector	4.90	
075X	5 Light Multiple with X32514 14-inch X-Ray Reflector	6.30	
075E	5 Light Multiple with E32514 14-inch Diffusing Reflector	6.70	
076P	6 Light Multiple with P32514 14-inch Porcelain Reflector	5.15	
076X	6 Light Multiple with X32514 14-inch X-Ray Reflector	6.55	
076E	6 Light Multiple with E32514 14-inch Diffusing Reflector	6.95	
The Special Reflectors in following group fit Cluster back and require no shade holders			
072A	2 Light Multiple with A114 14-inch Aluminum Reflector	4.65	
072M	2 Light Multiple with M114 14-inch Mirror Reflector	4.60	
072T	2 Light Multiple with T114 14-inch Tin Reflector	3.75	
073A	3 Light Multiple with A114 14-inch Aluminum Reflector	4.90	
073M	3 Light Multiple with M114 14-inch Mirror Reflector	4.85	
073T	3 Light Multiple with T114 14-inch Tin Reflector	4.00	
074A	4 Light Multiple with A114 14-inch Aluminum Reflector	5.15	
074M	4 Light Multiple with M114 14-inch Mirror Reflector	5.10	
074T	4 Light Multiple with T114 14-inch Tin Reflector	4.25	
075A	5 Light Multiple with A114 14-inch Aluminum Reflector	5.40	
075M	5 Light Multiple with M114 14-inch Mirror Reflector	5.35	
075T	5 Light Multiple with T114 14-inch Tin Reflector	4.50	
076A	6 Light Multiple with A114 14-inch Aluminum Reflector	5.65	
076M	6 Light Multiple with M114 14-inch Mirror Reflector	5.60	
076T	6 Light Multiple with T114 14-inch Tin Reflector	4.75	

For Shade Holders see page 59.

For Reflectors see page 62.

ADDITIONAL LENGTH STEM. Lengths up to 36 inch ($\frac{1}{2}$ -inch brass tubing), 30c foot list. Over 36 inches long ($\frac{1}{2}$ -inch iron pipe and casing), 45c foot list.

24 Assorted Cluster Fixtures, with or without Shades or Reflectors, but complete with stems and canopies, constitute a Standard Package.

Multiple—Interior

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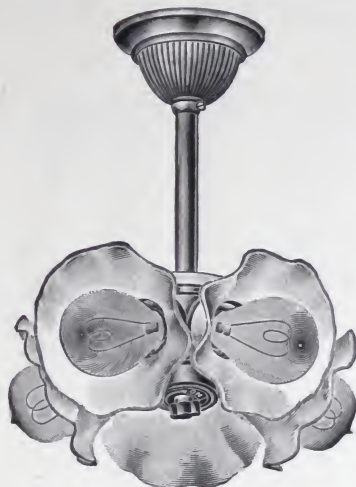
NATIONAL CODE STANDARD

Style 7 Cluster

Pendant Forms—Continued

Fixture stems (not exceeding 36-inch length) will be made of $\frac{3}{8}$ -inch brass tubing—longer lengths of $\frac{3}{8}$ -inch iron pipe and $\frac{3}{4}$ -inch brass casing.

Low canopy and crowfoot are furnished unless otherwise specified.



Style 07 S

G2255 Opal Shades shown

Standard length stem, 8-inch.

Standard finish, polished brass.

Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joint add \$0.70 to the following list prices.

Cat. No.			List Price, complete	Std. Pkg.
072	2 Light Multiple without Shades or Holders		\$3 25	24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.
073	3 Light Multiple without Shades or Holders		3 50	
074	4 Light Multiple without Shades or Holders		3 75	
075	5 Light Multiple without Shades or Holders		4 00	
076	6 Light Multiple without Shades or Holders		4 25	
Appropriate Shade Holders are included with the following.				
072G	2 Light Multiple with G2255 2½x5 Opal Shades		3 85	
072N	2 Light Multiple with N2256 2½x6 X-Ray Shades		5 45	
072V	2 Light Multiple with V1505 1½x5 Pagoda Shades		4 95	
072P	2 Light Multiple with P1506 1½x5 Diffusing Shades		5 05	
073G	3 Light Multiple with G2255 2½x5 Opal Shades		4 40	
073N	3 Light Multiple with N2256 2½x6 X-Ray Shades		6 80	
073V	3 Light Multiple with V1505 1½x5 Pagoda Shades		6 05	
073P	3 Light Multiple with P1506 1½x5 Diffusing Shades		6 20	
074G	4 Light Multiple with G2255 2½x5 Opal Shades		4 95	
074N	4 Light Multiple with N2256 2½x6 X-Ray Shades		8 15	
074V	4 Light Multiple with V1505 1½x5 Pagoda Shades		7 15	
074P	4 Light Multiple with P1506 1½x5 Diffusing Shades		7 35	
075G	5 Light Multiple with G2255 2½x5 Opal Shades		5 50	
075N	5 Light Multiple with N2256 2½x6 X-Ray Shades		9 50	
075V	5 Light Multiple with V1505 1½x5 Pagoda Shades		8 25	
075P	5 Light Multiple with P1506 1½x5 Diffusing Shades		8 50	
*076V	6 Light Multiple with V1505 1½x5 Pagoda Shades		9 35	

*Other Standard Shades are of too large diameter to permit their use with Style 7 6-Light Cluster.

For Shade Holders see page 59

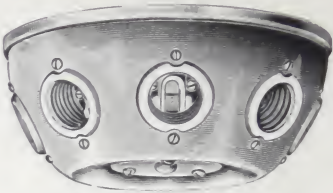
For Shades see page 61

ADDITIONAL LENGTH STEM. Lengths up to 36-inch ($\frac{3}{8}$ -inch brass tubing) 30c foot, list. Over 36 inches long ($\frac{3}{8}$ -inch iron pipe and casing) 45c foot, list.

Style 600 Cluster—Interior Forms

These Clusters are composed of a neatly designed metal shell with openings in which are located porcelain lamp receptacles of special design. The receptacles are so arranged in the Cluster that they can be easily connected, either in series or parallel.

All style 600 Clusters are provided with a casting tapped to receive stem. 608-612 inclusive tapped for 1/4-inch pipe, and 615-620 inclusive tapped for 1/2-inch iron pipe. No means are provided for attaching to ceiling without stem.



Polished brass finish is standard, and will be furnished unless otherwise ordered. Aluminum bodies furnished at same price, if preferred. Made in Edison base only.

Style 600 Cluster

No. 608 Cluster shown
Put up one in a box

Cat. No.			List Price	Std. Pkg.
608	8 Light Cluster	6 1/4-inch diameter	\$5.00	6
610	10 Light Cluster	8 1/4-inch diameter	5.60	6
612	12 Light Cluster	8 1/4-inch diameter	6 20	6
615	15 Light Cluster	11 1/4-inch diameter, 15 and 0	8.00	6
616	16 Light Cluster	11 1/4-inch diameter, 12 and 4	8.40	6
620	20 Light Cluster	11 1/4-inch diameter, 15 and 5	10.00	6

For special finishes see page 63

See cut next page for grouping of lamps 16 to 20 lights

All style 600 Clusters are provided with a casting tapped to receive stem. 608-612, inclusive, tapped for 3/8 inch iron pipe, and 615-620, inclusive, tapped for 1/2-inch iron pipe. No means are provided for attaching to ceiling without stem.



Polished brass finish is standard, and will be furnished unless otherwise ordered. Aluminum bodies furnished at same price if preferred. Made in Edison base only.

Style 600 R

PM60024—Plain Edge Mirror Reflector shown

			List Price, complete	Std. Pkg.
608PM	8 Lt. Clus.	6 1/4-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl.	\$9 50	6
610PM	10 Lt. Clus.	8 1/4-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl.	10.10	6
612PM	12 Lt. Clus.	8 1/4-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl.	10.70	6
615PM	15 Lt. 15 and 0	11 1/4-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl.	15.10	6
616PM	16 Lt. 12 and 4	11 1/4-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl.	15.50	6
620PM	20 Lt. 15 and 5	11 1/4-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl.	17.10	6
608BM	8 Lt. Clus.	6 1/4-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl.	13.00	6
610BM	10 Lt. Clus.	8 1/4-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl.	13 60	6
612BM	12 Lt. Clus.	8 1/4-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl.	14.20	6
615BM	15 Lt. 15 & 0	11 1/4-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl.	19.00	6
616BM	16 Lt. 12 & 4	11 1/4-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl.	19.40	6
620BM	20 Lt. 15 & 5	11 1/4-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl.	21 00	6

Style 600 Cluster—Interior Forms

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This Cluster is especially adapted for lighting public buildings, such as Churches, Halls, Etc.

Standard
length
stem
12 inches,
4½ x 4-inch
canopy
furnished.



Polished brass finish is standard and will be furnished unless otherwise ordered. Aluminum bodies will be furnished at same price, if preferred.

Style 0600 R

BM60030 Border Edge Mirror Reflector Shown

		List Price, complete	Std Pkg
0608	8 Light Cluster 6¼-inch diameter without Reflector	\$6 00	
0610	10 Light Cluster 8¼-inch diameter without Reflector	6 60	
0612	12 Light Cluster 8¼-inch diameter without Reflector	7 20	
0615	15 Light 15 and 0 11¼-inch diameter without Reflector	9 20	
0616	16 Light 12 and 4 11¼-inch diameter without Reflector	9 60	
0620	20 Light 15 and 5 11¼-inch diameter without Reflector	11 20	
0608PM	8 Lt. Cluster 6¼-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl.	10.50	
0610PM	10 Lt. Cluster 8¼-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl.	11 10	
0612PM	12 Lt. Cluster 8¼-in. dia. with PM60024 24-in. Pl. Edge Mirror Refl.	11 70	
0615PM	15 Lt. 15 & 0 11¼-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl.	16.30	
0616PM	16 Lt. 12 & 4 11¼-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl.	16.70	
0620PM	20 Lt. 15 & 5 11¼-in. dia. with PM60030 30-in. Pl. Edge Mirror Refl.	18 30	
0608BM	8 Lt. Clus. 6¼-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl.	14 00	
0610BM	10 Lt. Clus. 8¼-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl.	14 60	
0612BM	12 Lt. Clus. 8¼-in. dia. with BM60024 24-in. Bdr. Edge Mirror Refl.	15 20	
0615BM	15 Lt. 15&0 11¼-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl.	20 20	
0616BM	16 Lt. 12&4 11¼-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl.	20 60	
0620BM	20 Lt. 15&5 11¼-in. dia. with BM60030 30-in. Bdr. Edge Mirror Refl.	22 20	

24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a standard package.

Additional Length Stems

608-612 inclusive, ¾-inch iron pipe and ¼-inch brass casing	\$0 45 ft. list
615-620 inclusive, ½-inch iron pipe and 1 inch brass casing	60 ft. list

Arc-Burst

Style C

The Arc Lamp Displacer

Ceiling Form

In this new style Arc-Burst the highest point of illumination is attained, with few of the disadvantages that accompany the use of other light producers. The brilliant, yet noticeably soft and steady light of the Arc-Burst suggests its use for a wide range of conditions where satisfactory results are difficult to obtain, and compared with the flickering and unsteady burning of even an up-to-date Arc-Lamp, its merits are at once apparent.

A Special BENJAMIN WIRELESS CLUSTER forms the base of the Arc-Burst, around which are placed high efficiency meridian type lamps together with appropriate reflectors, so designed and placed in relation to the lamps that the light produced is radiated in the most effective manner.

Each Arc-Burst contains one 50 C. P. lamp in the bottom opening, which, together with its accompanying diffusing reflector, adds greatly to the cluster value, both as to the appearance and actual light distribution.

The Turn Down Feature

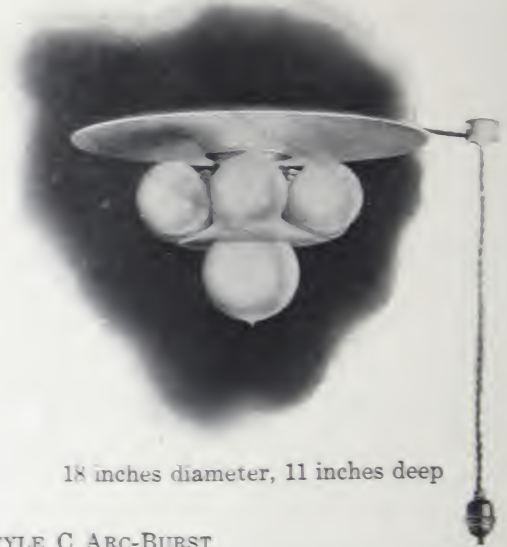
The Arc-Burst can be furnished with a Turn Down feature (designated by the letter "Y" following Cat. No.) which consists of isolating the centre lamp by means of a three wire connection in cluster body, whereby such lamp can be operated independently of the side lights by the use of a suitable switch.

Style C

This type of Arc-Burst is essentially a low ceiling cluster particularly applicable to stores, restaurants, etc., in basements or places where it is not desirable to use a stem. The cluster body is finished in frosted aluminum to conform with the white appearance of the lamps and reflectors.

Style "C" Arc-Burst consists of a cluster body, ceiling block, shade holders, reflectors and frosted meridian type lamps (25 C. P. in circle and 50 C. P. in bottom).

The special shade holders employed in the Arc-Burst permit the removal of all reflectors without disturbing the electrical connections.



18 inches diameter, 11 inches deep

LIST PRICES STYLE C ARC-BURST

Cat. No.	No. of Lamps	Total C. P.	Complete with Lamps		Complete less Lamps only	Standard Package
			90-130 Volts	200-250 Volts		
C 43	3	100	\$ 9 50	\$10 50	\$6 55	24 complete fixtures assorted, constitute a standard package
C 44	4	125	10 60	11 80	6 80	
C 45	5	150	11 70	13 10	7 05	
C 46	6	175	12 80	14 40	7 30	
C 47	7	200	13 90	15 70	7 55	
With Turn Down Feature "Y" (3-wire connection)						
C 43 Y	3	100	9 80	10 80	6 85	
C 44 Y	4	125	10 90	12 10	7 10	
C 45 Y	5	150	12 00	13 40	7 35	
C 46 Y	6	175	13 10	14 70	7 60	
C 47 Y	7	200	14 20	16 00	7 85	

For pendant switch with 3 ft. lamp cord add \$1.00 list to above prices. Additional cord 12c yard list.

Specify Lamp Voltage. Prices do not include cord or switch. For lamp renewals see page 33.

Not responsible for damage to goods after leaving our hands.

Arc-Burst -Continued

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Style D

Fixture Form

Wired ready to hang

Consists of Cluster
Body, Flange, 15-in.
Stem ($\frac{3}{8}$ -in. iron pipe
and $\frac{1}{4}$ -in. brass
casing), 4x4-in.
Canopy, Crowfoot,
Shade Holders,
Reflectors
and Lamps.



The special
shade holders
employed on the
Arc-Burst permit
the removal of all
reflectors without
disturbing electrical
connections.

Style D

18 inches diameter, 25 inches over all

LIST PRICES STYLE D ARC-BURST

Cat. No.	No. of Lamps	Total C. P.	Complete with Lamps		Complete less Lamps only
			90-130 Volts	200-250 Volts	
D43	3	100	\$11 00	\$12 00	\$8 05
D44	4	125	12 10	13 30	8 30
D45	5	150	13 20	14 60	8 55
D46	6	175	14 30	15 90	8 80
D47	7	200	15 40	17 20	9 05

With Turn Down Feature "Y" (3 wire connection)

D43Y	3	100	11 40	12 40	8 45
D44Y	4	125	12 50	13 70	8 70
D45Y	5	150	13 60	15 00	8 95
D46Y	6	175	14 70	16 30	9 20
D47Y	7	200	15 80	17 60	9 45

For pendant switch with 3-foot lamp cord add \$1 00 list to above prices. Additional cord 12c yard list.

Specify lamp voltage. For lamp renewals see page 33.

Frosted lamps will be furnished unless otherwise ordered.

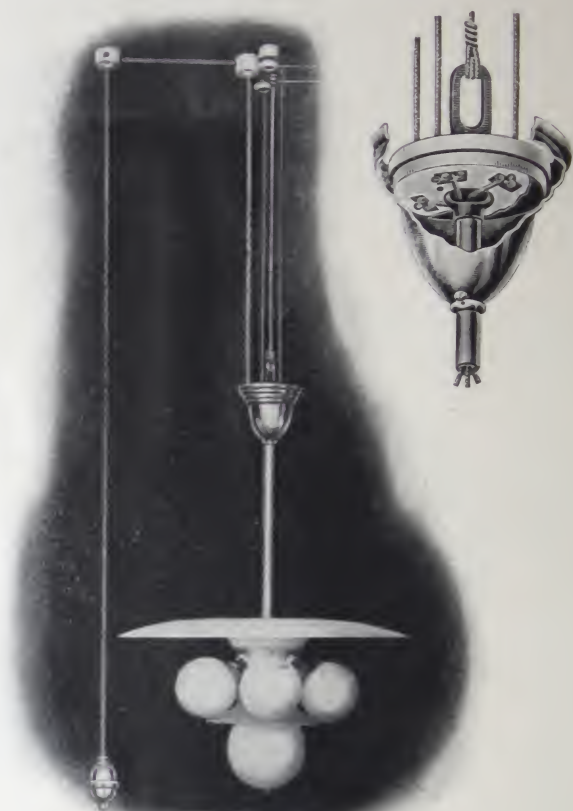
Extra length stem 50c per foot, list, including extra wire.

Ready to hang in place of Arc-Lamp without additional wiring

Type E consists of cluster body, flange, 15-inch stem (iron pipe and casing), canopy, porcelain connecting block (in canopy), hickey, loop, reflectors, shade holders and lamps, wired ready to hang.

Install as you would an arc-lamp; the connections are made on the under side of the connecting block, to which access is gained by lowering the canopy.

The special shade holders employed in the Arc-Burst permit the removal of all reflectors without disturbing the electrical connections.



18 inches diameter, 28 inches over all

LIST PRICES STYLE E ARC-BURST

Cat. No.	No. of Lamps	Total C. P.	Complete with Lamps		Complete less Lamps only	Standard Package
			90-130 Volts	200-250 Volts		
E43	3	100	\$11 90	\$12 90	\$8 95	24 complete fixtures assorted, constitute a standard package
E44	4	125	13 00	14 20	9 20	
E45	5	150	14 10	15 50	9 45	
E46	6	175	15 20	16 80	9 70	
E47	7	200	16 30	18 10	9 95	
With Turn Down Feature "Y" (3-wire connection)						
E43Y	3	100	12 30	13 30	9 35	
E44Y	4	125	13 40	14 60	9 60	
E45Y	5	150	14 50	15 90	9 85	
E46Y	6	175	15 60	17 20	10 10	
E47Y	7	200	16 70	18 50	10 35	

For pendant switch with 3-foot lamp cord add \$1.00 list to above prices. Additional cord 12c yard list. Specify lamp voltage.

For lamp renewals see page 33.

Not responsible for condition of goods after shipment. Delivery in good order to transportation company considered as delivery to purchaser.

Arc-Burst

33

Style F

Weatherproof Forms

The enormous demand for an out-door Arc-Burst resulted in the conception of the Style F shown herewith.

The cluster is wired up to the connection block at end of stem, which is provided with a removable aluminum cap to fit and lock over same, making the cluster absolutely weatherproof. Style F consists of cluster body, flange, 18 inch white porcelain enameled steel reflector, 8 inch stem ($\frac{1}{2}$ inch iron conduit), porcelain connecting block with stem wires attached, suspension fitting and 25 C. P. meridian type lamps.



18 inches diameter, 20 inches over all.

LIST PRICES STYLE F ARC-BURST

Cat No	No. of Lamps	Total C. P.	Complete with Lamps		Complete less Lamps only	Standard Package
			90-120 Volts	200-250 Volts		
F 43	3	75	\$10 10	\$10 70	\$7 55	24 complete fixture assorted constitute a standard package.
F 44	4	100	11 20	12 00	7 80	
F 45	5	125	12 30	13 30	8 05	
F 46	6	150	13 40	14 60	8 30	
F 47	7	175	14 50	15 90	8 55	

Net Renewal Prices

Description of Part	Standard Package		Broken Packages	
	90-120 Volts	200-250 Volts	90-120 Volts	200-250 Volts
No. 1. 25 C. P. tipped meridian type lamps	\$0 37	\$0 47	\$0 45	\$0 55
No. 2. 50 C. P. tipped meridian type lamps	55	70	65	80
No. 37. Prismatic Reflectors	50c each			
No. 81. 18-inch Opal Diffusing Reflector	\$1.00			

24 fixtures (assorted) constitute standard package.

24 lamps of one voltage and one C. P. constitute a standard package.

Not responsible for damage to goods after leaving our hands.

Arc-Burst

Weatherproof Fixtures

Style H

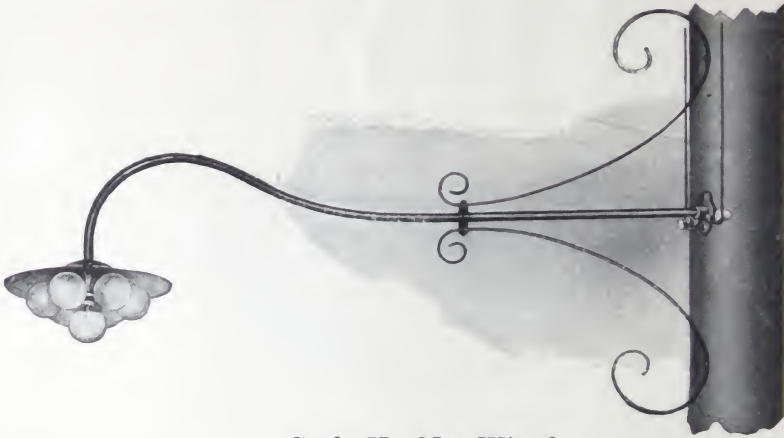
Bracket Form

This form of Arc-Burst fixture is the same as Style F except in the form of support, and is suitable for all conditions of out-door lighting.

Your boulevards would look well lighted with this fixture attached to suitable lamp posts.

Consists of cluster body, flange, reducer, 18-inch porcelain enameled steel shade, bracket, pole fitting and meridian type lamps (frosted or clear).

Bracket overhangs $5\frac{1}{2}$ feet and is made of $\frac{3}{4}$ inch iron pipe.



Style H—Not Wired

CLUSTER COMPLETE WITH BRACKET

Cat No.	No. of Lamps	Total C. P	Complete with Lamps		Complete less Lamps only	Standard Package
			90-130 Volts	200-250 Volts		
H 43	3	75	\$ 9 90	\$10 50	\$7 35	24 complete fixtures assorted, constitute a standard package
H 44	4	100	11 00	11 80	7 60	
H 45	5	125	12 10	13 10	7 85	
H 46	6	150	13 20	14 40	8 10	
H 47	7	175	14 30	15 70	8 35	
Cluster Complete less Bracket						
J 43	3	75	\$ 7 40	\$ 8 00	\$4 85	
J 44	4	100	8 50	9 30	5 10	
J 45	5	125	9 60	10 60	5 35	
J 46	6	150	10 70	11 90	5 60	
J 47	7	175	11 80	13 20	5 85	

Bracket only, including pole fitting, \$2.50 Standard package, 24.

Where Arc-Burst fixtures are ordered complete with lamps, frosted lamps will be furnished unless otherwise specified.

For lamp renewals see preceding page.

Weatherproof Forms

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Cluster Body, 3-inch Diameter, Style 2 Multiple

Cluster Body, 3-inch Diameter, Style 2½ Series

The Weatherproof Clusters listed hereunder are especially suited for out-door lighting and for mines, subways, etc., where the atmosphere is moist and damp.

The Socket Shells are of Copper, the Casings of Polished Aluminum and the Cluster-back sealed by a flange bolted thereto, which is tapped for ½-inch pipe. The Reflectors are made of heavy steel, enameled white inside and outside with best bath-tub enamel insuring white reflecting surface and long wear. Tapped for ½-inch pipe only.

W. P. Cluster and Flange with Enameled Steel Reflector only, no pipe included.



Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

Style 402

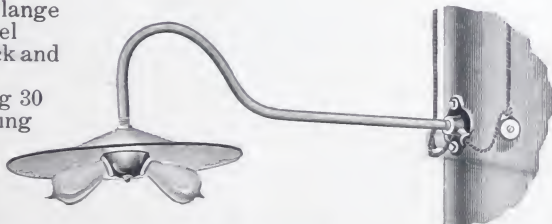
15-inch Enameled Steel Reflector. Cluster Base 3-inch Diameter

Cat. No.		List Price, complete	Std. Pkg.
4022	2 Light Multiple, Style 2 Cluster Body	\$3.40	24
4023	3 Light Multiple, Style 2 Cluster Body	3.65	24
4024	4 Light Multiple, Style 2 Cluster Body	3.90	24
4022½	2 Light Series, Style 2½ Cluster Body	3.45	24
4023½	3 Light Series, Style 2½ Cluster Body	3.75	12

For Reflectors see page 61

W. P. Cluster and Flange with Enameled Steel Reflector, Gooseneck and Fitting.

Gooseneck overhang 30 inches. Curved fitting for pole use is standard and will be furnished unless otherwise ordered.



Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

Style 502

15-inch Enameled Steel Reflector. Cluster Base 3-inch Diameter
Cluster Body with Gooseneck, Fitting and 15-inch Enameled Steel Reflector

Cat. No.		List Price, complete	Std. Pkg.
5022	2 Light Multiple, Style 2 Cluster Body	\$4.30	24 assorted Cluster fixtures with or without shades or reflectors, but complete with stems and fittings, constitute a Standard Package
5023	3 Light Multiple, Style 2 Cluster Body	4.55	
5024	4 Light Multiple, Style 2 Cluster Body	4.80	
5022½	2 Light Series, Style 2½ Cluster Body	4.35	
5023½	3 Light Series, Style 2½ Cluster Body	4.65	

For Gooseneck and Fittings see page 60

For Reflectors see page 61

W. P. Cluster and Flange with Enameled Steel Reflector and Suspension Fittings. Standard length pipe 8-inch.



Style 602

Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

15-inch Enameled Steel Reflector. Cluster Base 3-inch Diameter
Cluster Body with Suspension Fittings and 15-inch Enameled Steel Reflector

Cat No		List Price, complete	Std. Pkg.
6022	2 Light Multiple, Style 2 Cluster Body	\$3.90	24 assorted Cluster fixtures, with or without shades or reflectors, but complete with stems and fittings, constitute a Standard Package.
6023	3 Light Multiple, Style 2 Cluster Body	4.15	
6024	4 Light Multiple, Style 2 Cluster Body	4.40	
6022½	2 Light Series, Style 22 Cluster Body	3.95	
6023½	3 Light Series, Style 22 Cluster Body	4.25	

For Fittings see page 60

Cluster and Flange with Enameled Steel Reflector only, no pipe included



Style 401

Aluminum finish for W. P. Cluster Bodies is standard and will be furnished unless otherwise ordered.

15-inch Enameled Steel Reflector, Cluster Base, 4-inch diameter
Cluster Body with Back Flange and Enameled Steel Reflector

Cat No		List Price, complete	Std. Pkg.
4012	2 Light Multiple, Style 1 Cluster Body	\$3.70	12
4013	3 Light Multiple, Style 1 Cluster Body	3 95	12
4014	4 Light Multiple, Style 1 Cluster Body	4.20	12
4015	5 Light Multiple, Style 1 Cluster Body	4.45	24
4016	6 Light Multiple, Style 1 Cluster Body	4.70	24
4012½	2 Light Series Style 1½ Cluster Body	3.75	12
4013½	3 Light Series Style 1½ Cluster Body	4.05	12
4014½	4 Light Series Style 1½ Cluster Body	4.30	12
4015½	5 Light Series Style 1½ Cluster Body	4.55	24

For Reflectors see page 61

W. P. Cluster and Flange with Enameled Steel Reflector, Goose-neck and Fittings. Gooseneck overhang 30 inches. Curved fitting for pole use is standard and will be furnished unless otherwise ordered.



Polished Aluminum Casings for W. P. Cluster Bodies will be furnished unless otherwise ordered.

Style 501

15-inch Enameled Steel Reflector, Cluster Base 4-inch Diameter
Cluster Body with Gooseneck and Fittings, 15-inch Enameled Steel Reflector

Cat. No.		List Price Complete	Std. Pkg.
5012	2 Light Multiple, Style 1 Cluster Body	\$4 60	24 Assorted Cluster Fixtures, with or without shades or reflectors, but complete with stems and fittings, constitute a standard package.
5013	3 Light Multiple, Style 1 Cluster Body	4 85	
5014	4 Light Multiple, Style 1 Cluster Body	5 10	
5015	5 Light Multiple, Style 1 Cluster Body	5 35	
5016	6 Light Multiple, Style 1 Cluster Body	5 60	
5012½	2 Light Series, Style 1½ Cluster Body	4 65	
5013½	3 Light Series, Style 1½ Cluster Body	4 95	
5014½	4 Light Series, Style 1½ Cluster Body	5 20	
5015½	5 Light Series, Style 1½ Cluster Body	5 45	

For Goosenecks and Fittings see page 60.



Style 601

15-inch Porcelain Enameled Steel Reflector
Cluster Base 4-inch Diameter
Cluster Body with Suspension Fittings and 15-inch Enameled Steel Reflector

Cat. No.		List Price Complete	Std. Pkg.
6012	2 Light Multiple, Style 1 Cluster Body	\$4 20	24 Assorted Cluster Fixtures, with or without shades or reflectors, but complete with stems and fittings, constitute a standard package.
6013	3 Light Multiple, Style 1 Cluster Body	4 45	
6014	4 Light Multiple, Style 1 Cluster Body	4 70	
6015	5 Light Multiple, Style 1 Cluster Body	4 95	
6016	6 Light Multiple, Style 1 Cluster Body	5 20	
6012½	2 Light Series, Style 1½ Cluster Body	4 25	
6013½	3 Light Series, Style 1½ Cluster Body	4 55	
6014½	4 Light Series, Style 1½ Cluster Body	4 80	
6015½	5 Light Series, Style 1½ Cluster Body	5 05	

For Fittings see page 60

For Reflectors see page 61.

Weatherproof Forms

Style 600 Cluster Body

W. P. Cluster and Casting tapped for 1/4-inch iron pipe, with Enameled Steel Reflector only. No pipe included.



Style 600 Cluster in W. P. Forms will be furnished with Polished Aluminum Casings unless otherwise ordered. The receptacles are so arranged in the body that either series of parallel wiring may be used.

Style 40600

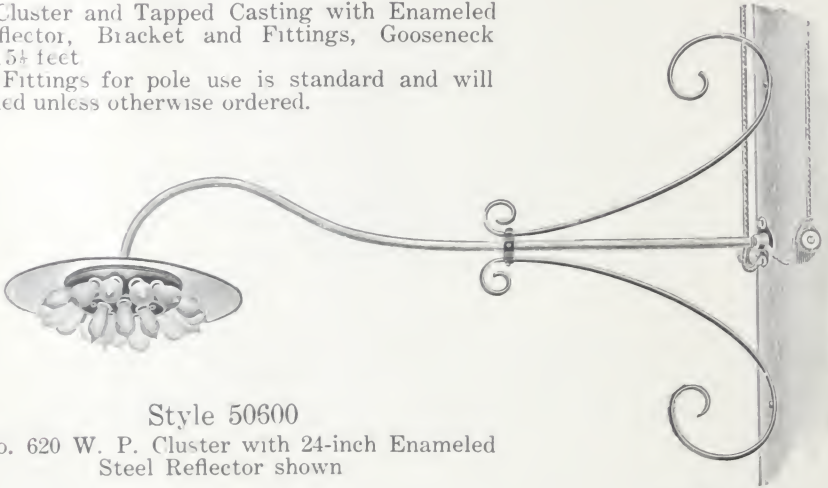
No. 608 W. P. Cluster with 20-inch Enameled Steel Reflector
Cluster Body and Tapped Casting with 20-inch Enameled Steel Reflector

Cat. No.		List Price Complete	Std. Pkg.
40608	8 Light Cluster, 6 1/4-inch diameter	\$8 00	6
40610	10 Light Cluster, 8 1/4-inch diameter	8 60	6
40612	12 Light Cluster, 8 1/4-inch diameter	9 20	6
Cluster Body and Tapped Casting with 24-inch Enameled Steel Reflector			
40615	15 Light - 15 and 0 - 1 1/4-inch diameter	12 00	6
40616	16 Light - 12 and 4 - 1 1/4-inch diameter	12 40	6
40620	20 Light - 15 and 5 - 1 1/4-inch diameter	14 00	6

For Reflectors see page 61

W. P. Cluster and Tapped Casting with Enameled Steel Reflector, Bracket and Fittings, Gooseneck Overhang, 5 1/2 feet

Curved Fittings for pole use is standard and will be furnished unless otherwise ordered.



Style 50600

No. 620 W. P. Cluster with 24-inch Enameled Steel Reflector shown

Cat. No.		List Price Complete	Std. Pkg.
Cluster and Bracket with 20-inch Enameled Steel Reflector			
50608	8 Light Cluster, 6 1/4-inch diameter	\$10.50	
50610	10 Light Cluster, 8 1/4-inch diameter	11 10	
50612	12 Light Cluster, 8 1/4-inch diameter	11 70	
Cluster and Bracket with 24-inch Enameled Steel Reflector			
50615	15 Light - 15 and 0 - 1 1/4-inch diameter	14 50	
50616	16 Light - 12 and 4 - 1 1/4-inch diameter	14 90	
50620	20 Light - 15 and 5 - 1 1/4-inch diameter	16 50	

24 assorted cluster fixtures, with or without shades or reflectors but complete with stems and fittings, constitute a standard package.

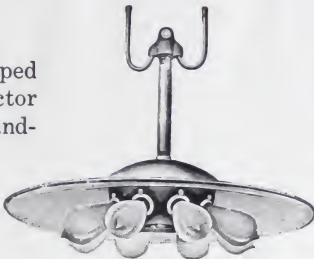
For Fittings see page 60.

For Reflectors see page 61.

Weatherproof Forms—Continued

Suspension Form

W. P. Cluster and Tapped Casting with Steel Reflector and Suspension Fittings, standard length pipe—8-inch.



Style 600 Cluster in W. P. Forms will be furnished with Polished Aluminum Casings unless otherwise ordered.

The receptacles are so arranged in the body that either series or parallel wiring may be used.

Style 60600

No. 608 W. P. Cluster with 20-inch Enameled Steel Reflector shown

Cluster complete with 20-inch Enameled Steel Reflector

Cat. No.		List Price Complete	Std Pkg.
60608	8 Light Cluster, 6 $\frac{1}{4}$ -inch diameter	\$8 50	24 assorted cluster fixtures, with or without shades or reflectors, but complete with stems and fittings, constitute a standard package.
60610	10 Light Cluster, 8 $\frac{1}{4}$ -inch diameter	9 10	
60612	12 Light Cluster, 8 $\frac{1}{4}$ -inch diameter	9 70	
Cluster complete with 24-inch Enameled Steel Reflector			
60615	15 Light Cluster, 11 $\frac{1}{4}$ -inch diameter	12 50	
60616	16 Light Cluster, 11 $\frac{1}{4}$ -inch diameter	12 90	
60620	20 Light Cluster, 11 $\frac{1}{4}$ -inch diameter	14 50	

For Fittings see page 60.
For Reflectors see page 61.

Sockets—Weatherproof

Benco

The All-Weather Socket—Recently Improved

Consists of a 1-piece porcelain receptacle and a 1-piece shell of aluminum or brass, with opening tapped for $\frac{1}{2}$ -inch or $\frac{3}{4}$ -inch iron pipe or conduit.

Wires can be looped in.

Binding screws are accessible from the front.

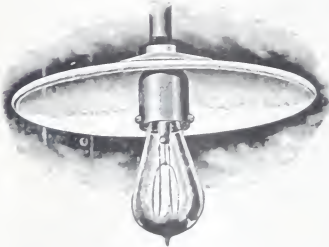
Used for street railway circuits (indoor and out), street lighting, in mines, factories, engine and boiler rooms, and in numerous places where wires are run in conduit and where unfavorable atmospheric conditions prevail.

Sockets Nos. 4201 and 4203 can be furnished with a $\frac{3}{4}$ -inch insulating socket with $\frac{1}{2}$ -inch opening to take a reinforced cord, adopting same for drop lights.



No. 4200

Cat. No.		List Price	Std. Pkg.
4200	With Aluminum Shell, tapped $\frac{1}{2}$ -inch	\$0 70	100
4201	With Aluminum Shell, tapped $\frac{3}{4}$ -inch	.70	100
4202	With Polished Brass Shell, tapped $\frac{1}{2}$ -inch	.70	100
4203	With Polished Brass Shell, tapped $\frac{3}{4}$ -inch	.70	100
4204	Insulating Socket Bushing $\frac{3}{4} \times \frac{1}{2}$ -inch	.05	100



No. 4210

Benco with Porcelain Enameled Steel Shade

This is the best combination of weather-proof socket and reflector on the market, both reflector and socket being tapped for $\frac{1}{2}$ -inch pipe, and each forming a weatherproof joint with the pipe.

Cat. No.		List Price	Std. Pkg.
4210	Benco with 10-inch Reflector	\$1 70	50
4215	Benco with 15-inch Reflector	2 70	50

Benco with Porcelain Enameled Steel Reflector, Gooseneck and Pole Fitting

The Gooseneck is formed from 3 feet of $\frac{1}{2}$ -inch iron pipe and overhangs 30 inches.

Gooseneck and pole fitting are enameled black.



Cat. No. 5110

Cat. No.		List Price	Std. Pkg.
5110	Complete with 10-inch Reflector	\$2 60	25
5115	Complete with 15-inch Reflector	3.60	25

For Weatherproof Fittings see page 60.
For Weatherproof Reflectors see page 61.

Benjamin Wireless Car Clusters

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As they appear in service



An interior view of a St. Louis Transit Company's Car equipped with Benjamin Car Clusters

The above named company is using several thousand of these clusters in its cars

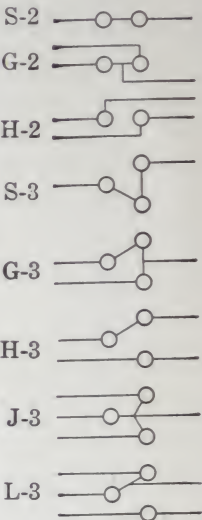
A partial list of other prominent Railway Companies using Benjamin Wireless Clusters follows:

Boston Elevated Railway Co., Boston, Mass.
Metropolitan Street Railway Co., New York City.
Interborough Rapid Transit Co., New York City.
American Railway Co., Philadelphia and other cities.
Washington Railway and Electric Co., Washington, D. C.
Metropolitan West Side Electric Railway Co., Chicago, Ill.
Chicago Union Traction Co., Chicago, Ill.
Los Angeles Railway Co., Los Angeles, Cal.

Series—Interior

Style 2½ Cluster Ceiling Forms

Great care has been taken in designing these series clusters to separate as widely as possible all contacts having a difference of potential; porcelain partitions being provided where necessary, in order to make the insulation as great as possible. The short threaded socket shells (used in Benjamin Wireless Clusters) permit of a wide separation between the inner and outer contacts. The porcelain insulating base thoroughly insulates the live portions and the outer shell from the support used.



The above diagram shows the variety of ways in which these clusters can be furnished. The "S" connection is *standard*, all others are *special*.

Extra charge will be made for *special* connections as follows :

G connection add to list	\$0 05	J connection add to list	\$0 15
H connection add to list	10	L connection add to list	.15

Made in Edison base only.



Polished Brass is standard finish, and will be furnished unless otherwise ordered.

Style 2½ Cluster

3-inch diameter

Cat No		Cluster body only	With No. 3200 Flange attached	Std. Pkg.
22½	2 Light Series (S-2)	\$1 30	\$1 40	24
23½	3 Light Series (S-3)	1 60	1 70	12

This cluster can be attached direct to outlet box by using No. 3223 flange. Made to fit Bossert boxes.

Style 2½ Flange Backs with Screws Attached



Tapped 3/8 inch—Cat. No. 3200



Cat. No. 3223



Tapped 1/2 inch—Cat. No. 3250

Cat. No.		List Price, each	Std. Pkg.
3200	Flange tapped for 3/8-inch iron pipe	\$0.10	24
3223	Flange for attaching to 3-inch outlet box	\$.10	24
3224	Flange for attaching to 4-inch outlet box	.15	24
3250	Flange tapped for 1/2-inch iron pipe	.15	24

Series—Interior

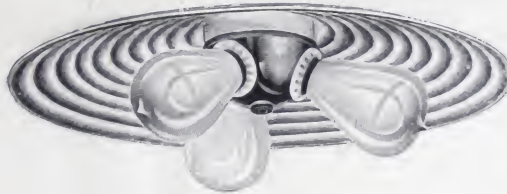
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Style 2½ Cluster

Ceiling Forms

Cluster with Reflector. For other supporting means see preceding page.



Metal Reflectors used with ceiling form (Style 2½) fit Cluster back and are placed between same and ceiling.

Style 2½ R

A214—14-inch Aluminum Reflector shown

Cat. No.		List Price, complete	Std. Pkg.
22½A	2 Light Series with A214 14-inch Aluminum Reflector	\$2.70	24
23½A	3 Light Series with A214 14-inch Aluminum Reflector	3.00	12
22½M	2 Light Series with M214 14-inch Mirror Reflector	2.65	24
23½M	3 Light Series with M214 14-inch Mirror Reflector	2.95	12
22½T	2 Light Series with T214 14-inch Tin Reflector	1.80	24
23½T	3 Light Series with T214 14-inch Tin Reflector	2.10	12
22½H	2 Light Series with H214 14-inch Enameled Steel Reflector	3.30	24
23½H	3 Light Series with H214 14-inch Enameled Steel Reflector	3.60	12

For Reflectors see page 62

Cluster with No. 200 Sub-base and Reflector.



The rubber rings on the Sub-base form a bearing surface for the Reflector and prevent its contact with metal, thus forming a firm support for the Shade.

Style 250 R

Car Cluster

Cat. No.		List Price, complete	Std. Pkg.
20022½	2 Light Series with No. 200 Sub-base, no Reflector	\$2.00	24
20023½	3 Light Series with No. 200 Sub-base, no Reflector	2.30	12
20022½P	2 Light Series with No. 200 Sub-base and 14-inch Opal Reflector	2.60	24
20023½P	3 Light Series with No. 200 Sub-base and 14-inch Opal Reflector	2.90	12
20022½X	2 Light Series with 14-inch X-Ray Reflector	4.00	24
20023½X	3 Light Series with 14-inch X-Ray Reflector	4.30	12

For Divided Circuits see page 42

For Reflectors see page 62

For Sub-base see page 57

Series—Interior

Style 2½ Cluster

Pendant Form

Fixture stems not exceeding 36-inch length will be made of ⅜-inch brass tubing—longer lengths of ⅜-inch iron pipe and ⅜-inch brass casing.

Low Canopy and Crowfoot are furnished unless otherwise specified.



Standard length stem, 8-inch.
Standard finish, Polished Brass.
Both standard finish and standard length stem will be furnished unless otherwise ordered.

For Deep Canopy and Insulating Joint add 70c to the following list prices.

Style 02½ R

Cat No		List Price Complete	Std Pkg.
022½	2 Light Series—no reflector or holder	\$2 00	
023½	3 Light Series—no reflector or holder	2.30	
Appropriate shade holders are included.			
022½P	2 Light Series with P32514—14-inch Porcelain Reflector	2 90	
022½X	2 Light Series with X32514—14-inch X-Ray Reflector	4 30	
022½E	2 Light Series with E32514—14-inch Diffusing Reflector	4.70	
023½P	3 Light Series with P32514—14-inch Porcelain Reflector	3 20	
023½X	3 Light Series with X32514—14-inch X-Ray Reflector	4 60	
023½E	3 Light Series with E32514—13½-inch Diffusing Reflector	5 00	
The Special Reflectors in following group fit Cluster back and require no shade holders.			
022½A	2 Light Series with A214—14-inch Aluminum Reflector	3 40	
022½M	2 Light Series with M214—14-inch Mirror Reflector	3 35	
022½T	2 Light Series with T214—14-inch Tin Reflector	2 50	
022½H	2 Light Series with H214—14-inch Enameled Steel Reflector	4 00	
023½A	3 Light Series with A214—14-inch Aluminum Reflector	3 70	
023½M	3 Light Series with M214—14-inch Mirror Reflector	3 65	
023½T	3 Light Series with T214—14-inch Tin Reflector	2 80	
023½H	3 Light Series with H214—14-inch Enameled Steel Reflector	4.30	

24 Assorted Cluster Fixtures, with or without shades or reflectors, but complete with stems and canopies, constitute a Standard Package.

For Divided Circuits see page 42
For Shade Holders see page 59
For Reflectors see page 62

ADDITIONAL LENGTH STEM. Lengths up to 36-inch (⅜-inch brass tubing), 30c foot, list. Over 36 inches long (⅜-inch iron pipe and casing) 45c foot, list.

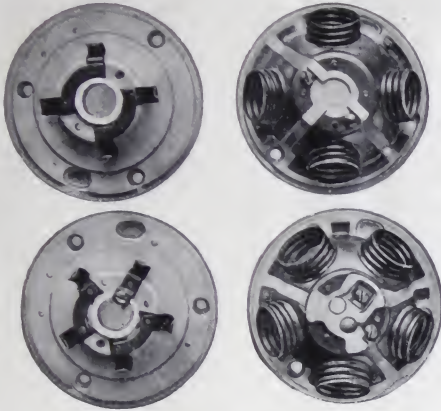
Series—Interior

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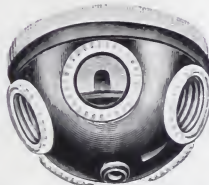
Style 1½ Cluster

Ceiling Form

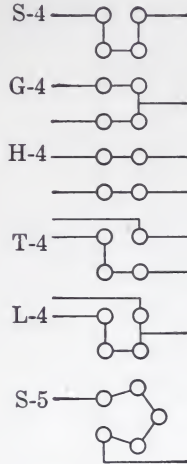
Great care has been taken in designing these series clusters to separate as widely as possible all contacts having a difference of potential; porcelain partitions being provided where necessary, in order to make the insulation as great as possible. The short threaded socket shells (used in Benjamin Wireless Clusters) permit of a wide separation between the inner and outer contacts. The porcelain insulating base thoroughly insulates the live portions and the outer shell from the support used.



Made in Edison base only. Fibre lined. Polished Brass is standard finish and will be furnished unless otherwise specified.



Style 1½ Cluster
4 inch diameter



The above diagram shows the variety of ways in which these clusters can be furnished. The "S" connection is *standard*, all others are *special*.

Extra charge will be made for *special* connections as follows:

G connection add to list	\$0 05
H connection add to list	10
T connection add to list	15
L connection add to list	.10

Cat.
No.

- 12½ 2 Light Series (S-2)
- 13½ 3 Light Series (S-3)
- 14½ 4 Light Series (S-4)
- 15½ 5 Light Series (S-5)

Cluster body
only

- \$1 55
- 1 85
- 2 10
- 2 35

With No 3100
Flange attached

- \$1 70
- 2 00
- 2 25
- 2 50

Std
Pkg.

- 12
- 12
- 12
- 24

Any of the special metal reflectors of corresponding style numbers will fit on back of cluster base and require no holders.

Where it is desired to attach these clusters to a stem or to an outlet box one of the following flanges will be required. No. 3100 flange will be attached at factory if so ordered.

Style 1½ Flange Backs with Screws Attached



Tapped 3/8 inch—Cat No 3100



Cat. No 3124



Tapped 1/2 inch—Cat. No. 3150

Cat.
No.

- 3100 Flange tapped for 3/8 inch iron pipe
- 3123 Flange to fit 3 inch Bossert box
- 3124 Flange to fit 4 inch Bossert box
- 3150 Flange tapped for 1/2 inch iron pipe
- 3175 Flange tapped for 3/4 inch iron pipe

List Price,
each

- \$0 15
- 15
- 15
- 20
- 20

Std.
Pkg.

- 24
- 24
- 24
- 24
- 24

Series—Interior

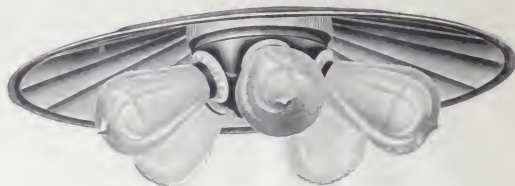
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Style 1½ Cluster

Ceiling Forms

Cluster with Reflector.

For other supporting means see page 45.



Metal Reflectors used with ceiling form (Style 1) fit Cluster back and are placed between same and ceiling.

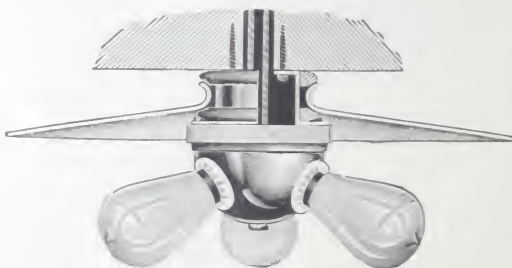
Style 1½ R

M114—14-inch Mirror Reflector shown

Cat. No.			List Price, complete	Std. Pkg.
12½A	2 Light Series with A114	14-inch Aluminum Reflector	\$2.95	12
13½A	3 Light Series with A114	14-inch Aluminum Reflector	3.25	12
14½A	4 Light Series with A114	14-inch Aluminum Reflector	3.50	12
15½A	5 Light Series with A114	14-inch Aluminum Reflector	3.75	24
12½M	2 Light Series with M114	14-inch Mirror Reflector	2.90	12
13½M	3 Light Series with M114	14-inch Mirror Reflector	3.20	12
14½M	4 Light Series with M114	14-inch Mirror Reflector	3.45	12
15½M	5 Light Series with M114	14-inch Mirror Reflector	3.70	24
12½T	2 Light Series with T114	14-inch Tin Reflector	2.05	12
13½T	3 Light Series with T114	14-inch Tin Reflector	2.35	12
14½T	4 Light Series with T114	14-inch Tin Reflector	2.60	12
15½T	5 Light Series with T114	14-inch Tin Reflector	2.85	24
12½H	2 Light Series with H114	14-inch Enameled Steel Reflector	3.55	12
13½H	3 Light Series with H114	14-inch Enameled Steel Reflector	3.85	12
14½H	4 Light Series with H114	14-inch Enameled Steel Reflector	4.10	12
15½H	5 Light Series with H114	14-inch Enameled Steel Reflector	4.35	24

Cluster with Sub-base and Reflector.

For Divided Circuit see preceding page.



The rubber rings on the Sub-base form a bearing surface for the Reflector and prevent its contact with metal, thus forming a firm support for shade.

Style 150 R Car Cluster

Cat. No.			List Price, complete	Std. Pkg.
10012½	2 Lt. Series with No. 100 Sub-base, no Reflector		\$2.25	12
10013½	3 Lt. Series with No. 100 Sub-base, no Reflector		2.55	12
10014½	4 Lt. Series with No. 100 Sub-base, no Reflector		2.80	12
10015½	5 Lt. Series with No. 100 Sub-base, no Reflector		3.05	24
10012P	2 Lt. Series with No. 100 Sub-base and P32514—14-in. Opal Reflector		2.85	12
10013P	3 Lt. Series with No. 100 Sub-base and P32514—14-in. Opal Reflector		3.15	12
10014P	4 Lt. Series with No. 100 Sub-base and P32514—14-in. Opal Reflector		3.40	12
10015P	5 Lt. Series with No. 100 Sub-base and P32514—14-in. Opal Reflector		3.65	24
10012X	2 Lt. Series with No. 100 Sub-base and X32514—14-in. X-Ray Reflector		4.25	12
10013X	3 Lt. Series with No. 100 Sub-base and X32514—14-in. X-Ray Reflector		4.55	12
10014X	4 Lt. Series with No. 100 Sub-base and X32514—14-in. X-Ray Reflector		4.80	12
10015X	5 Lt. Series with No. 100 Sub-base and X22514—14-in. X-Ray Reflector		5.05	24

For Reflectors see page 62

For Sub-base see page 57

Series—Interior

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Style 1½ Cluster

Pendant Forms

Fixture Stems (not exceeding 36 inch length) will be made of ¾-inch brass tubing; longer lengths of ¾-inch iron pipe and ¾-inch brass casing. Low canopy and crowfoot are furnished unless otherwise specified.



Standard length stem, 8 inch. Standard finish, polished brass. Both standard finish and standard length stem will be furnished unless otherwise ordered.

For deep canopy and insulating joints add \$0.70 to the following list prices.

Style 01½ R

X32514—X-Ray Reflector shown

Cat. No.		List Price, complete.	Std Pkg.
012½	2 Light Series without Reflector or Holder	\$2 30	
013½	3 Light Series without Reflector or Holder	2 60	
014½	4 Light Series without Reflector or Holder	2 85	
015½	5 Light Series without Reflector or Holder	3 10	
Appropriate Shade Holders are included with the following.			
012½P	2 Light Series with P32514 14-inch Porcelain Reflector	3 20	
012½X	2 Light Series with X32514 14-inch X-Ray Reflector	4 60	
012½E	2 Light Series with E32514 14-inch Diffusing Reflector.	5 00	
013½P	3 Light Series with P32514 14-inch Porcelain Reflector	3 50	
013½X	3 Light Series with X32514 14-inch X-Ray Reflector	4 90	
013½E	3 Light Series with E32514 14-inch Diffusing Reflector	5 30	
014½P	4 Light Series with P32514 14-inch Porcelain Reflector	3 75	
014½X	4 Light Series with X32514 14-inch X-Ray Reflector	5 15	
014½E	4 Light Series with E32514 14-inch Diffusing Reflector	5 55	
015½P	5 Light Series with P32514 14-inch Porcelain Reflector	4 00	
015½X	5 Light Series with X32514 14-inch X-Ray Reflector	5 40	
015½E	5 Light Series with E32514 14-inch Diffusing Reflector	5 80	
The special Reflectors in following group fit Cluster back and require no shade holders.			
012½A	2 Light Series with A114 14-inch Aluminum Reflector	3 70	
012½M	2 Light Series with M114 14-inch Mirror Reflector	3 65	
012½T	2 Light Series with T114 14-inch Tin Reflector	2 80	
013½A	3 Light Series with A114 14-inch Aluminum Reflector	4 00	
013½M	3 Light Series with M114 14-inch Mirror Reflector	3 95	
013½T	3 Light Series with T114 14-inch Tin Reflector	3 10	
014½A	4 Light Series with A114 14-inch Aluminum Reflector	4 25	
014½M	4 Light Series with M114 14-inch Mirror Reflector	4 20	
014½T	4 Light Series with T114 14-inch Tin Reflector	3 35	
015½A	5 Light Series with A114 14-inch Aluminum Reflector	4 50	
015½M	5 Light Series with M114 14-inch Mirror Reflector	4 45	
015½T	5 Light Series with T114 14-inch Tin Reflector	3 60	

24 Assorted Cluster Fixtures, with or without Shades or Reflectors, but complete with stems and canopies, constitute a standard package

For Shade Holders see page 59. For Reflectors see page 62.

ADDITIONAL LENGTH STEM. Lengths up to 36 inch (¾-inch brass tubing) 30c foot list. Over 36 inches long (¾-inch iron pipe and casing) 45c foot list.

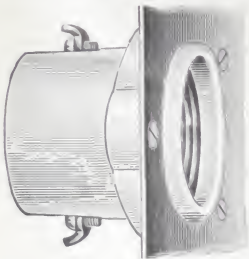
Sign Receptacles

NATIONAL CODE STANDARD

These Receptacles are designed for use with metal signs, junction or outlet boxes, border and foot-lights and for any work where it is desired to attach receptacles to sheet metal surfaces from the rear.

The receptacles are attached to metal surface by bolts furnished and included in price.

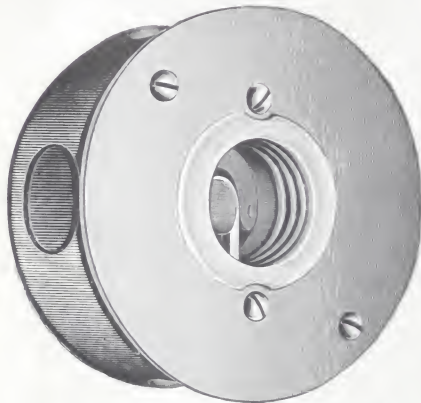
Special covers for any given make of outlet base can be furnished punched to receive No. 6 or No. 6A Receptacles (prices furnished upon application).



No. 6-S

No. 6S is essentially a Sign Receptacle, is furnished with three bolts which permits of the Receptacle being placed in any of *three* positions 120° apart, which greatly facilitates wiring.

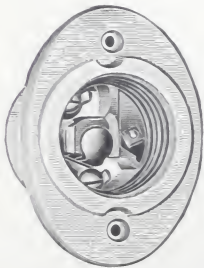
Cat. No.	List Price	Std. Pkg.
6S Sign Receptacle, with bolts	\$0.20	250



No. 6 Receptacle is also largely used for signs but is especially adapted for outlet boxes or for rows of lights made up with sheet metal boxes having a removable cover such as border or footlights for theatres, etc.

This cut shows No. 6 Receptacle mounted on a No. 3263 cover attached to a 3-inch Bossert outlet box.

Cat. No.	List Price	Std. Pkg.
6 Sign Receptacle with bolts	\$0.20	250



No. 6A

No. 6A is same as No. 6 except that it has internal connections accessible from the front of Receptacle, which makes its use desirable where conditions will not permit of connections being exposed.

Cat. No.	List Price	Std. Pkg.
6A Receptacle with bolts	\$0.25	100

Outlet Box Covers



Cat. No. 3263

Cat. No.	List Price	Std. Pkg.
3163 Steel cover (enameled black) fits 3-inch Bossert box	\$.10	25
3164 Steel cover (enameled black) fits 4-inch Bossert box . . . . .	.15	25
3263 Polished brass cover fits 3-inch Bossert box . . . . .	.15	25
3264 Polished brass cover fits 4-inch Bossert box . . . . .	.20	25

Cluster Wall Brackets

49

NATIONAL CODE STANDARD

The same general construction of our Ceiling Form Clusters is borne out in these Wall Brackets, insuring economy of installation together with that distinctly neat appearance always evident with Benjamin Wireless Clusters.

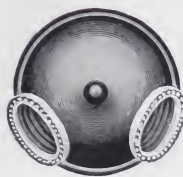
Made in one and two lights.

Edison
base
only.



Style 18

2½-inch diameter



Finished
Polished
Brass.

Style 19

3-inch diameter

Cat. No.		List Price	Std Pkg
18	1 Light Multiple, Bracket only	\$0 65	12
19	2 Light Multiple, Bracket only	1 00	12

These brackets can be attached direct to outlet boxes on the wall by using No. 3223 flange. Designed to fit Bossert boxes.



Cat. No. 3223



Style 18 S

G2255 Opal Shade shown



Style 19 S

G2255 Opal Shade shown

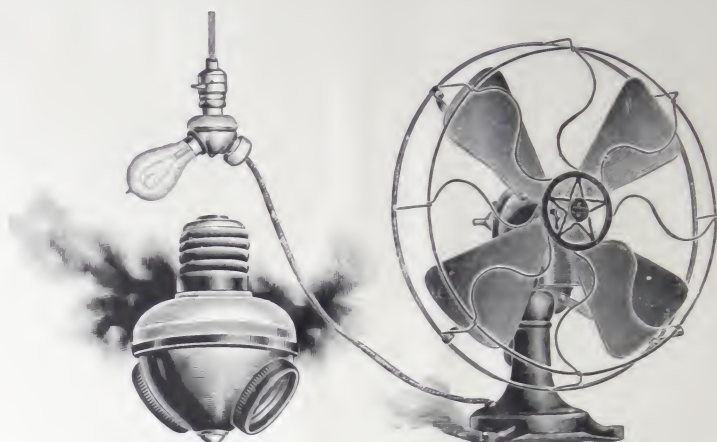
Cat. No.	Appropriate Shade Holders are included	List Price, complete	Std Pkg
18G	1 Light Bracket with G2255 2¼x5-inch Opal Shade	\$0 95	12
18N	1 Light Bracket with N2256 2¼x6-inch X-Ray Shade	1 75	12
18V	1 Light Bracket with V1505 1½x5-inch Pagoda Shade	1 50	12
18D	1 Light Bracket with D1506 1½x5-inch Diffusing Shade	1 55	12
19G	2 Light Bracket with G2255 2¼x5-inch Opal Shades	1 60	12
19N	2 Light Bracket with N2256 2¼x6-inch X-Ray Shades	3 20	12
19V	2 Light Bracket with V1505 1½x5-inch Pagoda Shades	2 70	12
19D	2 Light Bracket with D1506 1½x5-inch Diffusing Shades	2 80	12
3223	Flange for attaching to 3-inch outlet box	\$.10	24
3224	Flange for attaching to 4-inch outlet box	.15	24

For Shade Holders see page 59.

For Shades see page 61.

Benjamin

Wireless Receptacle Plug



Style 9.

Many thousands in daily use.

Fits any Edison base socket; receives any combination of lamps and attachment plugs. By its use a one light pendant can be converted into a cluster. You will need one of these when you connect your fan. Packed 12 in a box.

Cat No.		List Price, Each	Std. Pkg.
92	2 Light Multiple	\$1.00	48
92½	2 Light Series	1.10	24
93	3 Light Multiple	1.30	24
94	4 Light Multiple	1.60	24

If you want a convenient rheostat for charging storage batteries from a lamp socket, order a No. 93 B charging plug (not shown). This plug is same as No. 93 except that it is so connected that by connecting a lamp cord to binding screws in plug and running to terminals of battery, the lamps (in parallel) are connected in series with the battery. The rate of charge can be varied by inserting or removing lamps, the receptacle having three lamp openings.

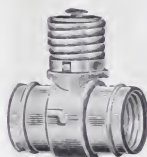
Cat No.		List Price, Each	Std. Pkg.
93B	3 Light Battery Charging Receptacle Plug	\$1.50	24

Continued

Benjamin Plug Twin Socket

The use of the Plug Twin Socket with old style show window sockets or receptacles that are already installed, insures more and better distributed light without the necessity of additional wiring.

The lamps being placed directly at right angles to the receptacle (which feature of itself wonderfully increases their effectiveness) and by adding the parabolic shades listed below or other similar shades, which allow free rotation on the plug, perfect light distribution may be obtained at any desired point.



Both plug and socket ends made in Edison base only.

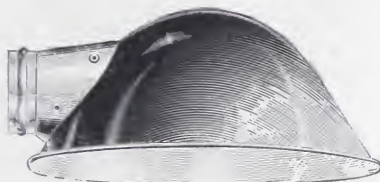
Plugs finished in polished brass will be furnished unless otherwise ordered.

Plug Twin Socket—Cat. No. 942

Put up 25 in a box

Cat. No.		Pol Brass each	Nickel Plated	Std Pkg.
942	Plug Twin Socket only	\$1 00	\$1 05	25

Parabolic shade for above socket will fit any other standard socket.



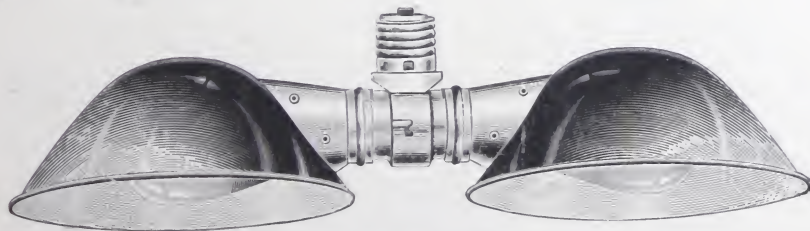
Frosted aluminum inside.
Green enameled outside.

Cat. No. 27

Cat. No.		List Price each	Std Pkg.
27	Standard 6-inch Parabola Shade	\$0 60	144

The BENJAMIN PLUG TWIN SOCKET with HALF SHADES when used in conjunction with sockets or receptacles previously installed for window lighting will increase by several times the value of such sockets as a light agency.

The angle at which the lamps are placed in the plug being directly at right angles to the socket, secures the maximum dehverance of light from the lamps, and by rotating the shades on the plug, the light may be distributed to any point at will.



Cat. No. 94227

Cat. No.	Plug Twin Socket complete with Parabolic Shades	List Price Complete	Std. Pkg.
94227	Plug Twin Socket and Shades	\$2 20	25

Show Window Lighting Appliances

Benjamin Twin Socket

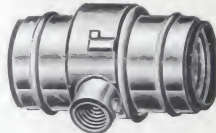
These sockets were designed with a view of effecting an economy of installation over the ordinary socket or receptacle for Show Window and Show Case work, and at the same time increase the effectiveness of the light-distributing agency through a more complete use of shades and reflectors than was formerly possible.

The first feature is accomplished by so mounting the contacts that both ends of the sockets are connected by a *single pair of wires* and locking the shell without the use of set-screws. By this means two socket ends are connected, with an economy of both wire and labor, over the corresponding cost with an ordinary socket or receptacle.

Secondly, the sockets permit the use of parabolic or other shades of similar shape, which, being clamped on the socket only firmly enough to be rigid, can be rotated at will to secure the proper light distribution.

On account of the excellent light distribution secured by the use of the Twin Socket, especially when used with individual shades, it is rapidly displacing sockets and other receptacles, for art galleries, libraries, etc., where the light must necessarily be evenly distributed over definite areas.

Made in Edison base only.



Sockets finished in Polished Brass will be furnished unless otherwise ordered.

Cat. No. 400—Twin Socket.

Cat. No.		List Price, each.	Std. Pkg.
400	Twin Socket only, polished brass	\$0.65	50
401	Twin Socket only, nickel plated	.70	50

Fittings for Twin Window Socket

$\frac{1}{4}$ -inch Nipple
 $\frac{1}{4}$ -inch long.



Polished Brass fittings will be furnished unless otherwise ordered.



$\frac{1}{4}$ -inch Flange
1 $\frac{1}{4}$ -inch diam.

Cat. No. 180—Nipple

Cat. No. 194—Flange

Cat. No.		List Price, each.	Std. Pkg.
180	$\frac{1}{4}$ -inch Nipple, $\frac{1}{4}$ -inch long, polished brass	\$0.10	50
181	$\frac{1}{4}$ -inch Nipple, $\frac{1}{4}$ -inch long, nickel plated	.12	50
194	$\frac{1}{4}$ -inch Flange, 1 $\frac{1}{4}$ -inch diameter, polished brass	.05	50
196	$\frac{1}{4}$ -inch Flange, 1 $\frac{1}{4}$ -inch diameter, nickel plated	.07	50
4184	Socket, complete, with Nipple and Flange, polished brass	.80	50
4186	Socket, complete, with Nipple and Flange, nickel plated	.90	50

Show Case Lighting Appliances

53

The following cut shows No. 401 Twin Socket attached to a brass tube by means of Special Clamp No. 451, which also clamps firmly around the socket neck. *No nipple is required*, thus leaving an extra large opening through which wires can be looped and connections made without taps.

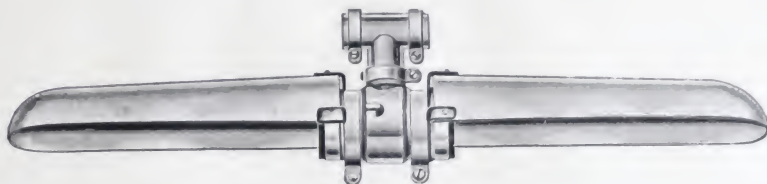


Cat. No. 42151 No tubes included

Wires can be looped into socket. Socket, Shades and Clamp *nickel plated only* in this complete grouping.

Made of No. 401 Twin Socket, No. 21 Half Shades and No. 451 Clamp, all nickel plated.

Cat. No.	List Price	Std. Pkg.
42151 Twin Socket and Shades with No. 451 Clamp	\$2 60	50

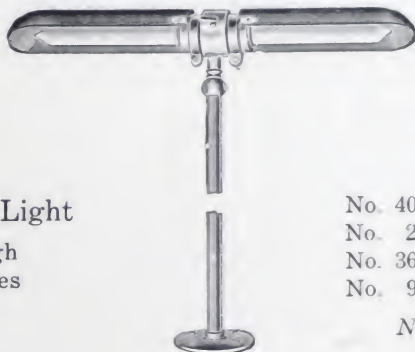


Cat. No. 42161

Socket and Half Shades with T-Clamp. Used with tubing when in sections. Wires are brought into socket direct from tube ends. Socket, Shades and T-Clamps *nickel plated only* in this completed grouping.

Made of No. 401 Twin Socket, No. 21 Half Shades and No. 461 T-Clamp, all nickel plated

Cat. No.	List Price	Std. Pkg.
42161 Twin Socket and Shades with No. 461 T-Clamp.	\$2 70	50



Show Case Column Light

Stands 20 inches high
13 inches over Shades

Made of

- No. 401 N. P. Twin Socket
- No. 21 N. P. Half Shades
- No. 364 N. P. $\frac{1}{2}$ -inch Tubing
- No. 97 N. P. Floor Flange

Nickel Plated only

Cat. No.	List Price	Std. Pkg.
421364 Show Case Column Light, complete	\$3 20	50

Cat. No. 421364

Additional Length N. P. Stem 35c ft. list

Show Case Lighting Appliances

The following fittings are stamped from heavy brass and are absolutely rigid when clamped around the tubing.

The shell of No. 460 T-Clamp is separable and by means of three clamping rings, which rigidly hold the two sections of the clamp together, a most economical tube joint may be effected. The T-clamp also permits the building up of the tubing in lengths to suit conditions, which coupled with the fact that the wires are drawn from the tube end rather than through small holes drilled in the tubing, commend the T-Clamp No. 460 for careful consideration in show case work.

The No. 450 Clamp is made to receive $\frac{1}{2}$ -inch tubing and neck of $\frac{1}{8}$ -inch socket in its bottom opening.

No. 470 Elbow is likewise made to receive $\frac{1}{2}$ -inch tubing and by means of the two clamping rings is made absolutely rigid. The shell of No. 470 Elbow is also separable and like No. 460 clamp is a great aid in the sectional building up of tubing.



Clamp



T-Clamp



Elbow

Cat. No.		List Price Each	Std. Pkg.
450	Clamp for $\frac{1}{2}$ -inch brass tubing, polished brass	\$0.25	25
451	Clamp for $\frac{1}{2}$ -inch brass tubing, nickel plated	0.30	25
460	T-Clamp for $\frac{1}{2}$ -inch brass tubing, polished brass	0.35	25
461	T-Clamp for $\frac{1}{2}$ -inch brass tubing, nickel plated	0.40	25
470	Elbow for $\frac{1}{2}$ -inch brass tubing, polished brass	0.30	25
471	Elbow for $\frac{1}{2}$ -inch brass tubing, nickel plated	0.35	25

Half shade
6 $\frac{1}{2}$ -inch long.



Half Shade

Nickel plated
only.

Cat. No.		List Price	Std. Pkg.
21	Half shade 6 $\frac{1}{2}$ -inch long, nickel plated only	\$0.80	144

Tubing not threaded

 $\frac{1}{2}$ -inch Brass Tubing

Cat. No.		List Price Per Foot
353	$\frac{1}{2}$ -inch Seamless tubing, polished brass	\$0.30
354	$\frac{1}{2}$ -inch Seamless tubing, nickel plated	0.35

For drilling wire openings add 5c each list.

For threading tubing add 5c list for each threaded end.

Lamp and Cluster Guards

55

Lamp Guard

This Lamp Guard is made in two halves, each half being pressed up from one piece of sheet steel with a spring added, to center and to protect the lamp from striking the guard. The two parts are hinged together and grip the socket, thus relieving the lamp from undue strain. The sheet metal forming guard is formed edgewise radially with lamp, thus presenting a thin edge to cast a shadow. The lamp and guard are easily removed. Made in one size (8 to 16 C. P.) only.



No. 160

Put up 12 in a box.

Cat. No.		List Price	Std. Pkg
160	Steel Lamp Guard (8 to 16 C. P.) tinned.	\$0.18	144



Cat. No. 165

Portable Lamp Socket

Consists of socket, handle and guard. The handle is jet enamel finish and is solidly attached to cap of socket.

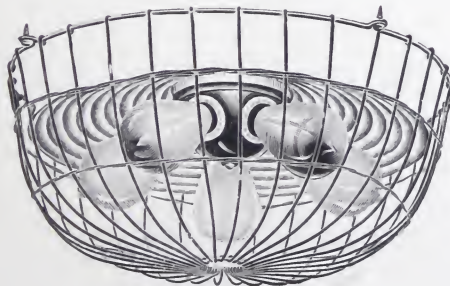
Put up 6 in a box

Cat. No.		List Price	Std. Pkg
165	Portable, complete, with Key Socket .	\$0 70	12
166	Portable, complete, with Keyless Socket	66	12
167	Portable, complete, with Key Socket, 2 yds. Cord and Attch. Plug	1 20	12
168	Portable, complete, with Keyless Socket, 2 yds. Cord and Attch. Plug	1 16	12

Extra Length Lamp Cord, per yd. 12c

Wire Cluster Guard

This Guard is strong and durable. It is attached to the ceiling by means of four wood screws.



Cat. No. 170

Made for
Benjamin Wireless
Cluster only.

This cage is made of
tinned wire and will
take a Cluster with
14-inch Shade.

Cat. No.	15 inches in diameter	List Price	Std. Pkg
170	Cluster Guard, 15-inch	\$1 00	12

Extensions, Adjusters, Etc.

Ben-Extension

One in a box
ready for use
made up and tested
in factory



No threaded
bushings in cap of
socket or
plug

Cat No		List Price
4302	2 yards keyless	\$0.80
4303	3 yards keyless	.90
4312	2 yards key	.80
4313	3 yards key	.90
Extra length cord, per yard		.12

Ben's Drop Light Adjuster

A simple and effective means of adjustably supporting a lamp in a horizontal position at any height, and of concentrating the light where it is wanted. The parabolic frosted aluminum shade can be rotated so as to throw the light in any desired direction.



Made from spring brass wire so formed as to spring over the socket and grip the cord. Can be used with any standard socket.

Patent applied for

435	Adjuster only	\$0.10
27	Frosted Aluminum Shade only	.60
4312A	Adjuster, Shade, 2-yard extension, with Key Socket and Attachment Plug	1 50
4313A	Adjuster, Shade, 3-yard extension, with Key Socket and Attachment Plug	1.60

Socket Rings

Made for Benjamin Wireless Cluster and
Plug Receptacles only



No. 10



No. 10 1/2

Cat. No.		List Price	Std. Pkg.
10	Porcelain Socket Ring	\$0.05	100
10 1/2	Imitation Hard Rubber Socket Rings	.04	100

Sub-Bases—Interior

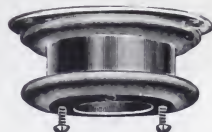
57

Styles 1 and 2 Metal Sub-Bases are intended to be used with clusters of corresponding style numbers and are adapted to hold firmly opal reflectors between the rubber rings. These Bases attach direct to ceiling or wooden block.



Style 1

Style 1 takes Clusters 1, 1 $\frac{1}{2}$, 7 and K.
Style 2 takes Clusters 2 and 2 $\frac{1}{2}$.



Style 2

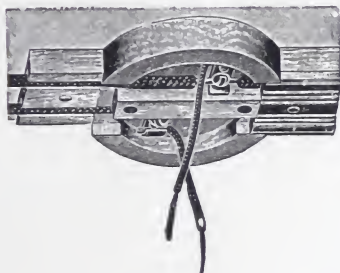
Sub-Bases with Rubber Rings and Screws attached

Cat. No.	List Price	Std. Pkg.
1 Metal Sub-Base, complete	\$0 70	24
2 Metal Sub-Base, complete	70	24

Porcelain Sub-Base

Takes Styles 2 and 2 $\frac{1}{2}$ Clusters only
Used for Moulding or Open Work

For multiple work this Sub-Base is furnished with wires attached.
For Series work no wires are required.



No. 284

The supporting screws pass through both Cluster and Sub-Base into ceiling.

Porcelain Sub-Base, 3 inches diameter

Cat. No.	List Price	Std. Pkg.
284 Porcelain Sub-Base, complete, with leads	\$0 30	24
284 $\frac{1}{2}$ Porcelain Sub-Base, complete, without leads or binding plates	10	24

Oak Ceiling Block

These Ceiling Blocks are made from oak and are varnished.
The back of Block is counter-bored to cover bushings or conduit projection.



No. 287

1 $\frac{1}{2}$ inches x 4 $\frac{1}{4}$ inches

This Block is suitable for attaching clusters or fixtures of any description to plastered or metal ceiling and is thick enough to be cut out to span mouldings.

Cat. No.	List Price	Std. Pkg.
287 Oak Ceiling Block	\$0 30	24

Canopies and Fittings

Polished Brass



No. 3170

Low Canopy

Polished Brass Canopy, $4\frac{1}{2}$ inches in diameter by $2\frac{1}{2}$ inches deep (furnished for most fixtures where insulating joint is not specified).

Cat. No.		List Price	Std. Pkg
3170	Polished Brass Canopy, $4\frac{1}{2} \times 2\frac{1}{2}$ inches, $\frac{1}{2}$ -inch slip	\$0 25	24
3175	Polished Brass Canopy, $4\frac{1}{2} \times 2\frac{1}{2}$ inches, $\frac{1}{4}$ -inch slip	.25	24

Deep Canopy

Polished Brass Canopy $4\frac{1}{2}$ inches in diameter by 4 inches deep (furnished where insulating joints are specified and for all Arc-Burst Clusters).



No. 3320

Cat. No.		List Price	Std. Pkg
3320	Polished Brass Canopy, $4\frac{1}{2} \times 4$ inches, $\frac{1}{2}$ -inch slip	\$0 40	24
3325	Polished Brass Canopy, $4\frac{1}{2} \times 4$ inches, $\frac{1}{4}$ -inch slip	40	24



No. 351

Polished Brass Fixture Stems

Cat. No.		List Price	Std. Pkg
351	$\frac{3}{8}$ -inch Polished Brass Tubing, 8 inches long, threaded	\$0 30	24 Stems assorted
	Additional length, per foot .30		
352	$\frac{3}{8}$ -inch Iron Pipe and $\frac{3}{8}$ -inch Polished Brass Casing, 8 inches long	45	
	Additional length, per foot .45		
355	$\frac{1}{2}$ -inch Iron Pipe and 1-inch Polished Brass Casing, 12 inches long	60	
	Additional length, per foot .60		

Nipples

Cat. No.		List Price	Std. Pkg
180	$\frac{1}{2} \times \frac{1}{4}$ -inch Polished Brass Nipples	\$0 10	50
181	$\frac{3}{8} \times \frac{1}{4}$ -inch Nickel Plated Nipples	12	50



No. 180



No. 194

Wall Plates

Cat. No.		List Price	Std. Pkg.
194	$\frac{1}{2} \times 1\frac{1}{2}$ -inch Wall Plate, female, Polished Brass	\$0.05	50
196	$\frac{1}{2} \times 1\frac{1}{2}$ -inch Wall Plate, female, Nickel Plated	.07	50

Shade Holders

Polished Brass Finish

This is a special 2 $\frac{1}{4}$ -inch Shade Holder made for Benjamin Wireless Clusters only and is held in position by the insulating socket ring.

Cat. No.	List Price	Std. Pkg.
245 2 $\frac{1}{4}$ -inch Shade Holder	\$0 10	144



No. 245

This is a special 1 $\frac{1}{2}$ -inch Holder made for Benjamin Wireless Clusters only and is attached same as No. 245.

Cat. No.	List Price	Std. Pkg.
246 1 $\frac{1}{2}$ -inch Shade Holder	\$0 10	144



No. 246

This Holder is adapted to support a shade with a 2 $\frac{1}{4}$ -inch neck and made in both $\frac{3}{8}$ -inch and $\frac{1}{2}$ -inch slip.

Cat. No.	List Price	Std. Pkg.
2470 2 $\frac{1}{4}$ -inch Holder, $\frac{3}{8}$ -inch Slip	\$0 20	144
2475 2 $\frac{1}{4}$ -inch Holder, $\frac{1}{2}$ -inch Slip	20	144



No. 2470

This 3 $\frac{1}{4}$ -inch Holder is made to support shade from stem.

Cat. No.	List Price	Std. Pkg.
2490 3 $\frac{1}{4}$ -inch Holder, $\frac{3}{8}$ -inch Slip	\$0 30	144
2495 3 $\frac{1}{4}$ -inch Holder, $\frac{1}{2}$ -inch Slip	30	144



No. 2490

Fixture Fittings

Iron



No. 1950

Cat. No.	Malleable Iron Crowfeet	List Price	Std. Pkg.
1950	Tapped for $\frac{3}{8}$ -inch iron pipe	\$0.05	144
1955	Tapped for $\frac{1}{2}$ -inch iron pipe . . . . .	.08	144

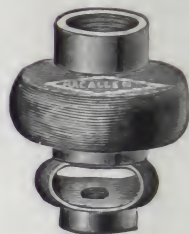
Insulating Joints

1223	$\frac{1}{2}$ x $\frac{1}{2}$ -inch Malleable Iron . . . . .	.60	144
1226	$\frac{1}{2}$ x $\frac{3}{4}$ -inch Malleable Iron . . . . .	.80	144



No. 1450

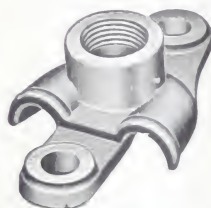
	Mal. Iron Hickey	List Price	Std. Pkg.
1450	$\frac{3}{4}$ x $\frac{1}{2}$ -inch Hickey	15	144
1455	$\frac{1}{2}$ x $\frac{3}{4}$ -inch Hickey	20	144



No. 1455

Gooseneck

Formed from 3 feet of $\frac{1}{2}$ -inch iron pipe enameled black



No. 5024

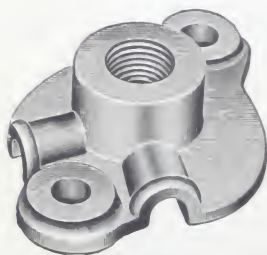


No. 5036

5036	30-inch Gooseneck60	24
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Wall Fitting

Cat. No.	Used with No. 5036 Gooseneck when attaching to flat surfaces. Enameled black	List Price	Std. Pkg.
5024	Wall Fitting tapped for $\frac{1}{2}$ -inch pipe	\$0.30	24



No. 5025

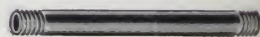
Pole Fitting

Used with No. 5036 Gooseneck for attaching to poles or curved surfaces

5025	Pole Fitting tapped for $\frac{1}{2}$ -inch iron pipe30	24
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$\frac{1}{2}$ x 8-inch Nipple

Cat. No.	Made from loricated conduit, used for Outdoor Clusters (suspension form)	List Price	Std. Pkg.
6008	$\frac{1}{2}$ x 8-inch Nipple	\$0.25	24



No. 6008

Weatherproof Suspension Fitting

Enameled black, used for outdoor Clusters (suspension form)

6028	Suspension Fitting tapped for $\frac{1}{2}$ -inch pipe	30	24
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No. 6028

Shades and Reflectors

61

These Shades are especially adapted for use with Benjamin Wireless Clusters.

Opal Shade Fits No. 245 Holder

Cat. No.	List Price	Std. Pkg.
G2255 2½x5-inch Opal Shade	\$0 20	144



Cat. No. G2255—Opal

X-Ray Shade One-piece Mirror Fits No. 245 Holder

Cat. No.	List Price	Std. Pkg.
N2256 2½x6-inch X-Ray Shade	\$1.00	60



Cat. No. N2256—X-Ray Shade

Pagoda Prismatic Shade Fits No. 246 Holder

Cat. No.	List Price	Std. Pkg.
V1505 1½x5-inch Pagoda Shade	\$0 75	120



Cat. No. V1505—Pagoda

White Diffusing Prismatic Shade Fits No. 246 Holder

Cat. No.	List Price	Std. Pkg.
D1506 1½x5-inch Diffusing Shade	\$0 80	144



Cat. No. D1506
Diffusing

Parabolic Frosted Aluminum Half Shade

This Shade is well adapted for use with the No. 4 Twin Socket and the No. 942 Twin Socket Plug (see pages 51 to 53) but may be used with any Edison Socket.

Cat. No.	List Price	Std. Pkg.
27 Par. Frosted Alum. Half Shade.	\$0 60	144



Cat. No. 27—Aluminum

This is a nickel plated half shade especially adapted for use with the No. 4 Twin Socket and No. 942 Twin Socket Plug for show case and window lighting.

Cat. No.	List Price	Std. Pkg.
21 Nickel Plated half shade	\$.80	144



Cat. No. 21—Nickel Plated

Reflectors for Out-Door Use

These reflectors are made from heavy steel with a thick coat of fire enamel.

The center is fitted with a nut tapped for iron pipe. The reflector is white on both sides.



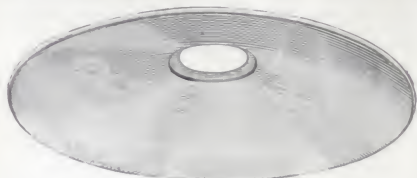
Porcelain Enameled Steel

Cat. No.	List Price	Std. Pkg.
H10 10-inch steel shade tapped ½-inch	\$1 00	24
H15 15-inch steel shade tapped ½-inch	2 00	24
H18 18-inch steel shade tapped ½-inch	2 50	24
H20 20-inch steel shade tapped ½-inch	3 00	24
H54 24-inch steel shade tapped ½-inch	4 00	24

Reflectors

For Interior Lighting

The following group are special Metallic Reflectors made to fit the back of Cluster Body and require no shade holder. When used with Ceiling Cluster the Reflector is placed between the ceiling and the cluster back and when used with Cluster Fixtures the Reflector is held between cluster back and flange.



Tin



Mirror



Aluminum



Porcelain Enameled Steel



Opal



X-Ray



Prismatic Diffusing

Tin Reflectors

Cat. No.	White inside and green outside	List Price	Std. Pkg.
T114	14-in., fits styles 1, 7 and K	\$0.50	24
T116	16-in., fits styles 1, 7 and K	.60	24
T214	14-in., fits style 2 Cluster.	.50	24
T216	16-in., fits style 2 Cluster.	.60	24
T812	12-in., fits style 8 Cluster.	.40	24

Mirror Reflectors

Sectional glass, green outside

M114	14-in., fits styles 1, 7 and K	1.35	24
M116	16-in., fits styles 1, 7 and K	1.65	24
M214	14-in., fits style 2 Cluster.	1.35	24
M216	16-in., fits style 2 Cluster.	1.65	24
M812	12-in., fits style 8 Cluster.	1.10	24

Aluminum Reflectors

Polished inside, green outside

A114	14-in., fits styles 1, 7 and K	1.40	24
A116	16-in., fits styles 1, 7 and K	1.70	24
A214	14-in., fits style 2 Cluster.	1.40	24
A216	16-in., fits style 2 Cluster.	1.70	24
A812	12-in., fits style 8 Cluster.	1.20	24

Porcelain Enameled Steel Reflectors

Most durable Reflectors made; white inside and outside

H114	14-in., fits styles 1, 7 and K	2 00	24
H214	14-in., fits style 2 Cluster.	2 00	24

The following group require Shade Holders

Opal Reflectors

P32512	12x2½-in. Opal Reflector	.50	48
P32514	14x3½-in. Opal Reflector	.60	48
P32516	16x3½-in. Opal Reflector	.90	36
P32518	18x3½-in. Opal Reflector	1.30	36

X-Ray Reflectors

A Mirror Reflector in one piece

X32514	14x3½-in. X-Ray Reflector	2.00	15
X32516	16x3½-in. X-Ray Reflector	2.30	15
X32518	18x3½-in. X-Ray Reflector	2.60	15

Prismatic Diffusing Reflector

A white Prismatic Reflector

E32514	14x3½-in. Diffusing Refl.	2.40	24
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Special Finishes

Polished Brass is standard finish for all interior clusters and fixtures where not otherwise designated in catalogue. Polished Aluminum shells are standard for all weatherproof clusters and sockets.

Frosted Aluminum cluster shells are standard for all Arc-Burst clusters.

Extra charge is made for all finishes not standard unless otherwise provided for in catalogue as follows:

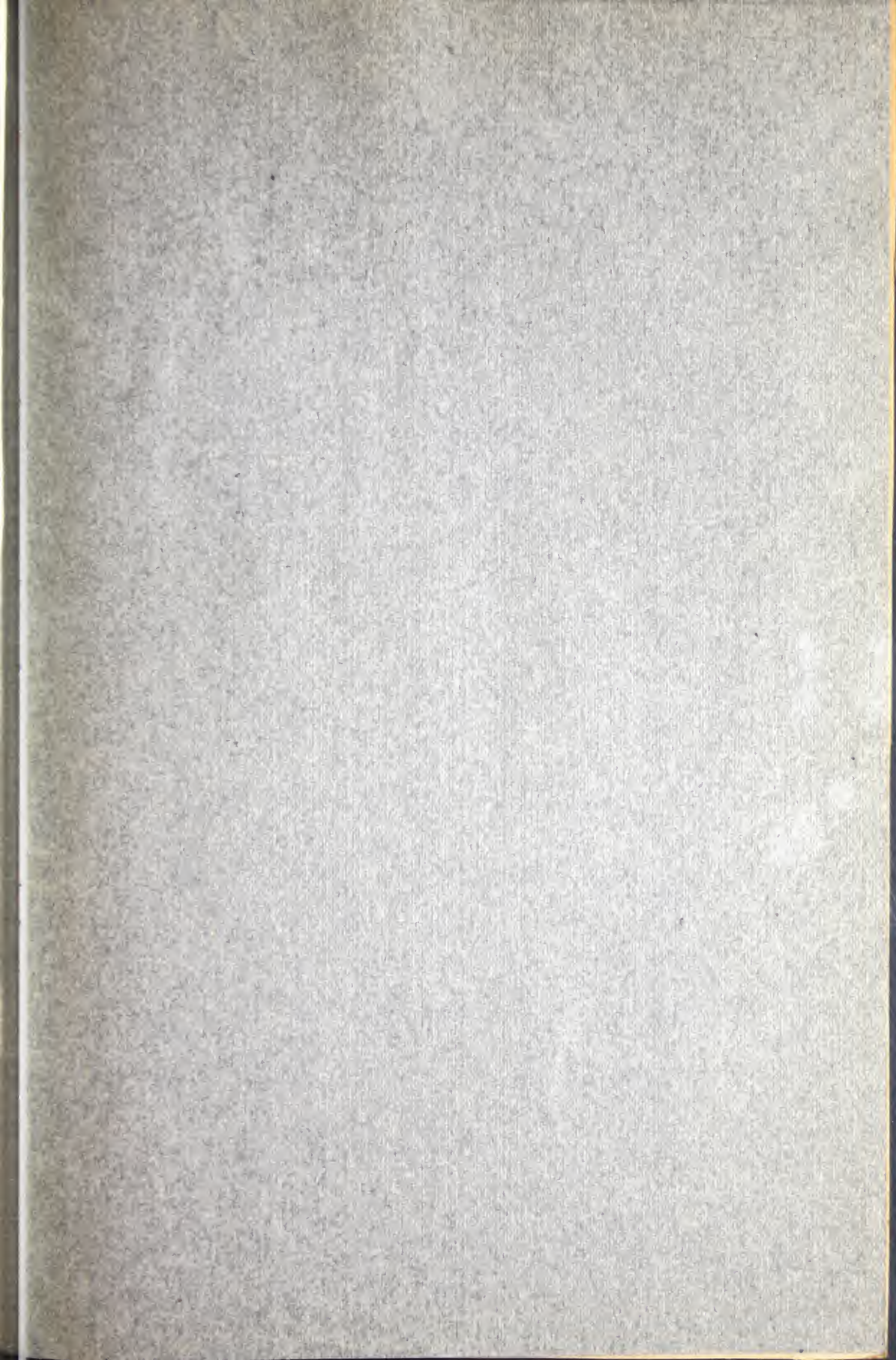
Add to List Prices

	Cluster bodies only	Stems, canopies, shade holders, etc.
Old brass	5%	10%
Rich gilt	5%	10%
Wrought iron	5%	10%
Black marine	5%	10%
Bariff Bariff	10%	20%
Oxidized copper	10%	20%
Mottled copper	10%	20%

Prices on other finishes quoted on application.

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TO THE TRADE

GENTLEMEN:

We wish to express our appreciation of your moral support and patronage during the recent patent litigation between ourselves and the Dale Company.

We are pleased to advise you of the fact that a decision has recently been rendered, which, although not as sweeping as we expected, is in the main in our favor.

Judge Holt held that our patents in suit were, in his opinion, valid, as per the following, taken from the decision :

"The Clusters manufactured under the Benjamin patents immediately entered into extensive commercial use. I think there is sufficient mechanical invention shown in the Benjamin patents to make the patents valid."

That the Court was not certain of his ground in the matter of infringement is clearly indicated by the following extract taken from his opinion :

"Upon the question whether the Clusters manufactured by the defendants under the patent issued to Dale infringed the complainants' patents, I have felt much doubt. The Dale patent certainly does not differ greatly from the Benjamin patents, and particularly patent No. 721,777, commonly spoken of as the second patent in suit.

"Upon the whole, I think that the defense of the invalidity of the complainants' patent is not sustained, but that the defense of non-infringement is sustained."

We feel greatly encouraged to appeal the case to the higher Court, and confidently look for a decision more completely in our favor.

We solicit a continuation of the good will you have shown in the past, and trust that the superiority of our goods will warrant your placing future orders with us.

BENJAMIN ELECTRIC MFG. CO.

November 10, 1905.



